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NEW STEEL ELEVATOR AT FORT WILLIAM, ONT.

For five consecutive years, Fort William and Port Arthur on Lake Superior have continued to add to their grain elevator equipment, and the end is not yet. The last addition, just finished, can only be the last for a brief time, for there are others following in the procession. For the time being, however, the new steel elevator of the Ogilvie Flour Mills Company, Ltd., of Montreal and Winnipeg, shown by our cut, occupies this position of "the last."

This building is the nucleus of the first milling plant established on the banks of the Kaministiquia River. A few years ago the town of Fort William offered tempting inducements to the great Canadian milling concern to locate a branch of its extensive milling business within the corporate limits of the town. A strip of water front, about 600 feet along the river, was procured and presented to the company under a contract, by which the latter agreed to establish an elevator and flour mill of stipulated capacity in a given time. The foundations and excavations were scarcely completed when the late William Ogilvie, president of the milling company, was called to his last account. This unfortunate loss resulted in a three years' postponement in carrying out the project. In

the meantime, the Milling Company was reorganized and incorporated with some of the most influential business men of Montreal in the directorate.

These last three years also saw wonderful progress in the development of elevator building and the demise of the wooden terminal elevator. There were many up-to-date candidates, with alluring

propositions represented in the competition for the favor of the company, and some time was lost in making a selection of plans for the new building. The Macdonald Engineering Company of Chicago was finally awarded the contract to erect a first-class, modern, fireproof elevator of 500,000 bushels' capacity; and the work of blasting out the frozen bank of the Kaministiquia River for the foundation

for that structure was commenced last April. Work was carried on night and day during most of the following eight months; and on December 1 last, the electric current was first turned on, giving motion to every wheel in the finished building.

The structure is of the well-known steel cylindrical construction type used by these contractors, and shown in part in the sections of the elevator herewith. All of the interspaces and outside pockets between the cylinders are available for storage, which means that the entire volume of the bin structure is practically a solid storage space.

A unique feature of this building is in the first story, or basement, construction, which, with the foundation, hopper bottoms of the bins, floors and supporting columns, is all in one monolithic mass of re-enforced concrete. This first story gives a working space under the entire area of the bins ten feet high, and contains four belt conveyors and the steel spouting by which bins are emptied into the elevator legs. There



NEW STEEL GRAIN ELEVATOR FOR OGILVIE FLOUR MILLS COMPANY, LTD., AT FORT WILLIAM, ONT.
Macdonald Engineering Company, Chicago, Engineers and Contractors.

are three steel elevator legs of 15,000 bushels' capacity per hour, for handling the grain in and out of the building.

All grain is received from C. P. Ry. cars in a steel two-story track shed, which has space for two tracks and room for two loaded cars on each track. There is a separate track hopper for each of the four cars (which may be simultaneously set for unloading), each of which holds nearly a full carload and are of solid concrete, extending across the car shed under both tracks. The two interior track hoppers adjacent to the building discharge directly into the elevator legs. The two track hoppers under the outer track reach the elevator legs by means of belt conveyors under each hopper.

It is intended that the house be operated by two shovel screws only, and that they shall be kept busy. While two loaded cars are being placed on one track, the cars on the other are being un-

this elevator has become the standard practice of the contractors in building steel elevators. The essential feature of this arrangement is that it eliminates all floors above the bin floor in the cupola. All machinery and scales are controlled from this floor, where the operations are in plain view of the operator. The different parts of the machinery throughout the cupola above the bin floor are accessible by means of concrete walks, fitted with guard rails, but the cupola above the bin floor is practically an open frame of steel, covered with galvanized iron, with the least possible amount of superfluous floor surface for the accumulation of dust. There are three Fairbanks Hopper Scales in the cupola, of 1,600 bushels' capacity, each having steel hoppers and garners, the register check beams being located on the bin floor under the scales.

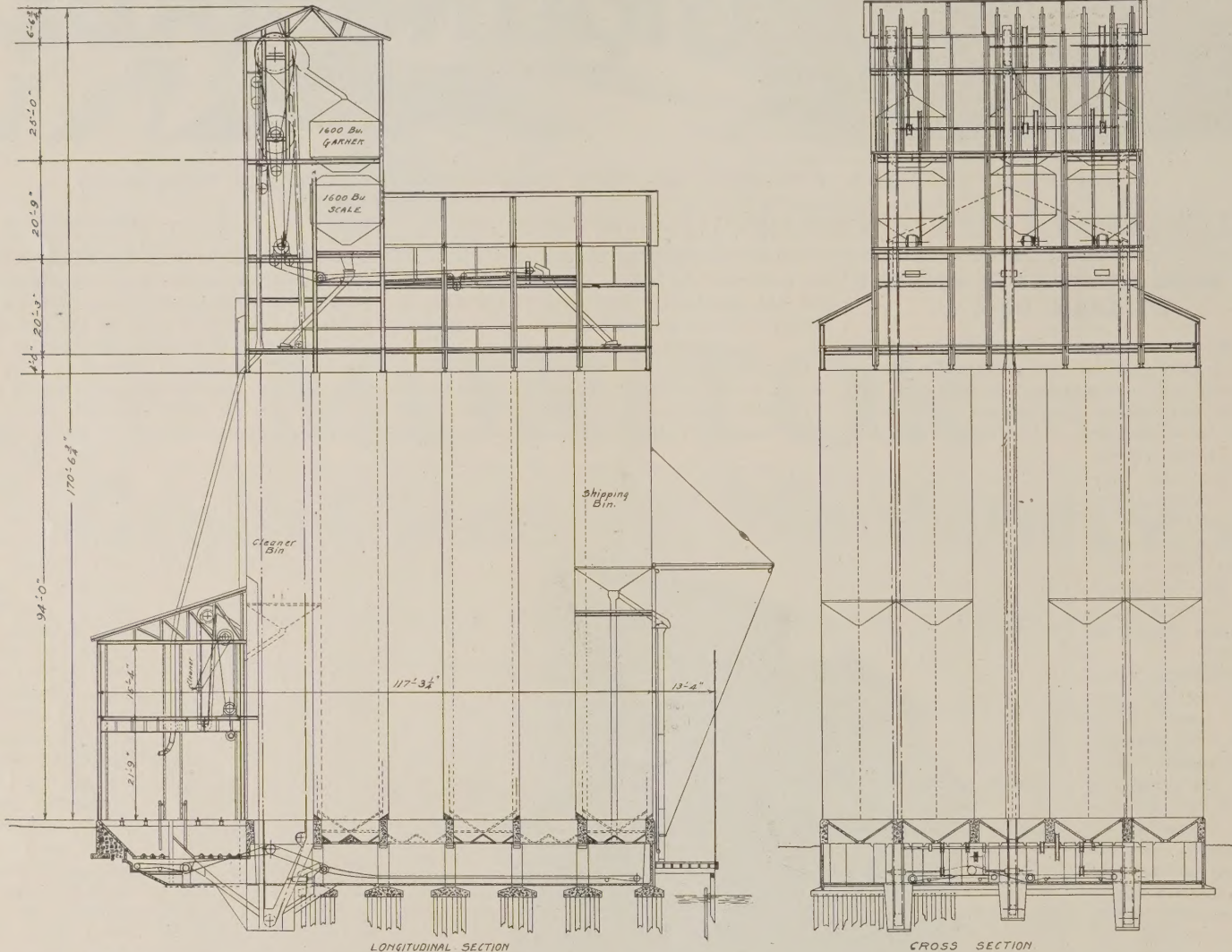
The second story of the train shed is occupied by

different machines and elevators throughout the building.

There were about 1,500 tons of steel used in the construction of the building, all of which was imported by the contractors from Pittsburg and manufactured on the job in their own improvised shops.

It is reported that interests identical with the owners of this plant have secured control of Kecebecka Falls, about sixteen miles up the Kaministiquia River, and will develop 20,000 electrical horsepower for distribution to this plant and other industries in town. The foundation for a 3,000-barrel flour mill has just been completed adjacent to the elevator building, and it is intended to proceed with erecting the superstructure early in the coming season.

Notwithstanding strenuous efforts to bring about a break and no startling new developments, the so-



LONGITUDINAL AND CROSS SECTIONS OF GRAIN ELEVATOR OF THE OGILVIE FLOUR MILLS CO., LTD., FORT WILLIAM, ONT.

loaded. The empties are then pulled and two new loads set and the car doors open by the time the shovels are ready. Each track hopper is made independent, so that the contents may be held till the operator is ready to send it to the elevator leg. When the shovel crew has finished unloading a car, they step into the car on the adjacent side with the same shovel mechanism and immediately continue the shoveling; thus, the service of both men and machinery may be continuous.

Simultaneously with the receiving operation the shipping may proceed by an independent shipping leg. The belt conveyor system in the basement permits of delivering grain from any bin in the house to the shipping leg without interfering with the unloading, or if desired, all elevator legs may be turned on to shipping. There are four shipping bins, each fitted with a galvanized steel shipping spout, and all shipping bins may be reached from the shipper leg and scale.

The arrangement of cupola machinery adopted in

the cleaning and dust collecting machinery, which consists of four double receiving separators from the Invincible Grain Cleaner Co., Silver Creek, N. Y. Each machine is entirely covered with steel and is equipped with an elevator leg for re-elevating the clean grain, which discharges it into the bottom compartment of the cleaner bins. An elevator leg and conveyor placed in the floor of the cleaner room is provided for disposing of the by-products of the cleaning machines, which are delivered to a separate bin by means of the screenings leg. The cleaning machinery is equipped with a complete system of Day Dust Collectors located above the roof of the train shed. The conveying and elevating machinery was all furnished by the Webster Manufacturing Company, Chicago.

The electric power current is furnished from the new power house of the C. P. Ry. Company and delivered at a voltage of 600 at the elevator. A complete equipment of Westinghouse Alternating Current Motors is installed and attached to the

called high price of wheat is being pretty well maintained. All the arguments of the bulls are being verified. The market now reacts as quickly from breaks under \$1.15 as it did a while ago from under \$1.10. The next movement may be to \$1.20 or \$1.25. In fact, the wildest predictions as regards the probable price are likely to be fulfilled. I call it merely the realization of a condition that should have been apparent to anyone months ago, and with many short on nothing but the price, the position of the Eastern crowd now looks invincible. No better evidence could be asked of the intrinsic value of wheat than the high price being paid for good wheat in Minneapolis and St. Louis, the two greatest milling centers. I believe that May wheat will, some time during the next four months, sell at three times the price of May corn and five times the price of May oats. There is an abundance of both and plenty of the contract grade, but the very opposite is true of wheat.—Edward G. Heeman, January 7.

[For the "American Elevator and Grain Trade."]

MUTUAL ELEVATOR INSURANCE: ITS SUCCESS AND ECONOMY.

BY EDWARD DINSLEY,

General Agent Millers' National Insurance Company.

The mutual insurance companies that have made a specialty of grain elevator and flour mill insurance, some of them for the past twenty or twenty-five years, have saved millions of money to policy holders, as compared with the cost of old line or stock company insurance on the class. These companies are the Millers' National Insurance Co. of Chicago; Michigan Millers' Mutual Fire Insurance Co. of Lansing, Mich.; Indiana Millers' Mutual Fire Insurance Co. of Indianapolis; Millers' Mutual Fire Insurance Association of Alton, Ill.; Grain Dealers' National Mutual Fire Insurance Co. of Indianapolis, and others equally as good.

This saving is not the result of any miracle or any special run of good luck, but of the economy practiced in the management of the business and the careful selection and inspection of the risks insured, thus reducing the loss ratio.

It requires no stretch of the imagination to account for a goodly portion of the savings made by the mutual companies when you compare the expense of management of the two classes of companies, which averages, at a conservative estimate, from fifteen to twenty-five per cent less in the mutual companies than in the stock companies. In addition to this, the stock companies aim to pay dividends to the stockholders, which they have done liberally in the past from the profits of the business, and accumulated a large reserve besides; while the mutual companies' cost covers the actual losses and expenses only, and a small per cent for reserve.

In addition to the savings effected by the mutual companies over the stock companies by the two means given—expense of management and dividends, which equal fully from twenty to thirty per cent in favor of the mutual companies—there is a further saving made in the reduced loss ratio in the mutual companies by the careful selection of all the risks insured, and the frequent and rigid inspection, following the acceptance of the risks, by inspectors versed in the hazard peculiar to the class, and the requiring of the assured to remedy the defects. This inspectors find them ready and willing to do, knowing it is to their benefit, as well as the companies', as the cost of the insurance in a mutual company is determined by the number of losses sustained.

The three essential differences between the two classes of companies—mutual and stock, or old line, companies—as accounted for by the savings made to the policy holders by the mutual companies, as compared with the cost in the old line companies, are:

First.—Lower expense ratio, or cost of conducting the business, by mutual companies as compared with stock companies, which averages, as stated, from 15 to 25 per cent.

Second.—Dividends paid to stockholders by the stock companies, which do not enter into the cost of a mutual company, as there are no stockholders.

Third.—The lower loss ratio of mutual companies, which is owing to the careful selection of the risks insured and more rigid and frequent inspections made by mutual companies than by stock companies.

The stock company is a money-making proposition; the mutual company is a money-saving proposition.

It should not be hard to determine, in the light of the success of the mutual companies that have made a specialty of elevator insurance and their present sound financial standing, which class of companies the elevator owner should insure with.

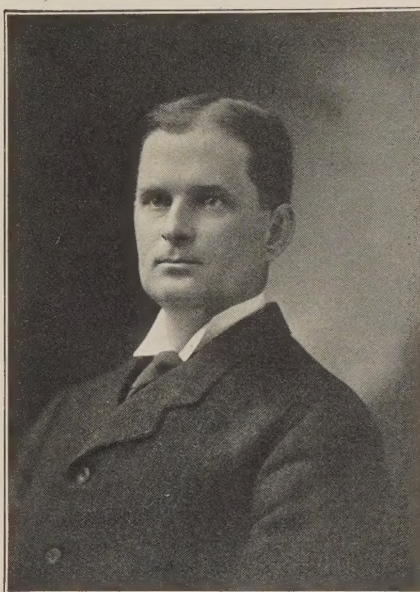
The mutual companies write not only the buildings and machinery, but they also short-term grain insurance on the mutual plan, giving their policy holders the benefit of their mutual policy on this

class of insurance. The saving on this class is relatively greater than on the insurance on buildings and machinery, or permanent insurance, as the stock companies charge short rates on this class when written for periods less than one year, while the mutual companies' cost represents only the assessments levied during the time the policy is in force, and is from 40 to 60 per cent less than the cost in old-line companies.

The standing of the mutual companies is so strong, and the record of cost so enlightening, that no elevator owner, in our judgment, can afford to insure in any other class of companies.

WM. S. TODD.

The fact that many successful business men of each one's personal acquaintance have been men without special academic education has created in the minds of some young men the idea that such education is unnecessary, if not, indeed, as some radicals believe, a detriment to a young man training for a strictly business career. One need not go into the contrary argument, which is axiomatic with older men, who realize the flexibility, breadth and grasp of the trained mind, to which training in



WM. S. TODD, CINCINNATI.

the schools is in so many cases a sort of substitute for long practical experience.

Wm. S. Todd of Cincinnati, Ohio, we may fairly say is a man of this type, for although measured by length of years in the grain business his experience has been comparatively quite short, yet he is the head of a business, that of The Interstate Grain Co. of Ohio, which, though itself comparatively new, is increasing beyond its own expectations and planting itself day by day on a surer foundation in the confidence of the grain trade.

Born in Warren County, Ohio, the son of a well-known family of that section, Mr. Todd was educated in his home schools; later attended college at Wooster, Ohio, where he received a general literary education, and then, having an inclination for mechanical lines, he later took a course in mechanical and electrical engineering at the Rose Polytechnic Institute at Terre Haute, Ind. For a number of years he was engaged in this line of work, in which he gained valuable experience and a reputation as a mechanic of unusual ability; but desiring to have a more direct interest in his work, he entered the grain elevator business.

In 1903 he became general manager of The Interstate Grain Co. of Indiana, which operates elevators on the C., C. & L. and C., H. & D. Later, he was elected president of The Interstate Grain Co. of Ohio, which company conducts a general grain receiving and shipping business at Cincinnati.

Mr. Todd is recognized as a competent and progressive grain man, who has proved himself effi-

cient in the business. A man of broad and comprehensive views in business, he is a gentleman in the true sense of the word, whom it is a pleasure to come in contact with and who has many friends in the trade who wish him unlimited success.

FIRST GRAIN ARRIVAL AT PITTSBURG VIA WABASH.

Friday, December 23, has become a red-letter day in the railway and commercial history of Pittsburgh, for on that day the Wabash Railway brought into the city the first car of grain ever run over its new line into Pittsburgh. As though an augury of prosperous times ahead, this year, Wabash No. 65730, came laden with that most important of all the American cereals—corn.

The car started from Magee, Laporte County, Indiana, with 1,500 bushels of prime yellow-ear corn, consigned to Daniel McCaffrey's Sons Company, 716-718 Fifth Avenue, Pittsburgh. This old and well-known hay and grain firm is always well to the front when an opportunity for enterprise presents itself, and their action in this instance was only in line with their general policy to give their customers first choice of America's grain.

W. D. Holliday, local freight agent, says the Wabash thus opens up to Pittsburgh and vicinity one of the richest agricultural sections of the United States. This shipment was, of course, but the first shipment of an enormous volume of future business, in which the Daniel McCaffrey's Sons Company will, no doubt, have a liberal share. They are in touch with the shippers in this productive region and will handle a quantity of its hay and grain.

"In these prosaic days," says the Pittsburgh Post, "we take such happenings very coldly. A few decades ago the bells of this city would have been rung, bands would have serenaded the railway officials and there would have been a general holiday. The Messrs. McCaffrey at least have not been backward and deserve the felicitations of their fellow townsmen."

GRAIN INSPECTORS DROPPED.

On January 1 State Grain Inspector W. Scott Cowen retired from the service of the grain inspection department a number of employees—some apparently for political reasons; but "the state grain office," said Mr. Cowen, "has been running \$2,000 a month short for years, and it is absolutely necessary that there should be some changes before the surplus now to the credit of the department is eaten up. I have gone over the list of employees and endeavored to sift out the men whose services are least required. Where men were not giving first-class service their names were put on the list regardless of their political pull. My desire is to reduce the list of employees until it is possible to meet every dollar of the expense of the office with the receipts. The dismissals provided for will reduce the payroll about \$2,000 a month."

Among the men retired are Wm. Bidwill, a brother of the late chief inspector, Jos. Bidwill, whose head fell off during the republican convention, when Governor Yates could no longer tolerate his "offensive partisanship"—for another candidate; Pat. E. Canfield, Bidwill's brother-in-law, and John Lorimer, a brother of Congressman Billy Lorimer—all of "whose services are least required."

Wm. Bidwill has been supervising inspector at South Chicago, and Mr. P. E. Canfield, second assistant inspector at the Armour elevators on Goose Island. Among others decapitated are Dan Ryan, second assistant inspector, and Mr. Baker, third assistant inspector at the Union Elevator. The deposed inspectors have been considered by those acquainted with the work as the equals of any inspectors on the force, and each has spent a lifetime in the grain inspection and elevator business. William Bidwill has been with the inspection department since the state has had control of it, or over 30 years continuously, as a grain inspector, having been a second assistant inspector long

before his brother, Mr. Joseph Bidwill, was connected with the department. P. E. Canfield had been in the grain elevator and inspection business for over thirty years; was superintendent of the City Elevator over thirty years ago and superintendent of the construction of the Iowa Elevator, and was superintendent of it for a number of years, giving up this position to take the management of the Indiana and Wabash Elevators for Geo. L. Dunlap. When Mr. Dunlap retired from business Mr. Canfield was appointed a grain inspector. He filled the position until January 1, and is known to all grain and elevator people in Chicago as one of the best inspectors and judges of grain in the state of Illinois.

Mr. Baker was employed in the old Galena Elevator, before the Chicago fire—prior to 1871; was foreman of the Galena Elevator when rebuilt, about a year after the fire, which position he held until Munger, Wheeler & Co. retired from the elevator business. Then he was appointed to the state grain inspection force, which position he held until this discharge.

Daniel Ryan was weighmaster at the Galena for about twenty years, and at the time Munger,

and the state weigher, and will be negotiable and transferable. Many of the farmers do not, it appears, quite understand this kind of business and the form of collateral offered by the warehouse receipts; but "a prominent rice man" assures them in the Houston Post that, "In states where this kind of law is already in force the warehouse receipts are considered the very best collateral by banks, as in the great grain-growing states of Illinois, Missouri, Minnesota and Kansas; and I cannot see why it would not work as well with Texas rice as with other grains."

TWO INTERESTING PAMPHLETS.

The University Press, Urbana, Ill., has recently issued two remarkably interesting studies, with the following titles:

"Illinois Railway Legislation and Commission Control since 1870," by J. H. Gordon, A. M. Paper, pp. 81; price, 25 cents.

"The Granger Movement in Illinois," by A. E. Paine, A. M. Paper, pp. 53; price, 35 cents.

Mr. Gordon's monograph, which has an introduction by Prof. M. B. Hammond, giving a history of railway construction and attempts at state control

VIEWS IN THE NEW PLANT OF THE KAY-PIM MANUFACTURING COMPANY.

A great many changes have been made in the plant of the Kay-Pim Manufacturing Co. at North Broadway and Monroe Street, St. Louis, and now it is safe to say that, considered as a modern machinery plant, with new and up-to-date machines throughout, it has no superior. The accompanying pictures show a bird's-eye view of the works and two views of the interior of the machine shops.

The main shop has been practically rebuilt and is covered over its full length by a monitor top, with side and sky lights, according to the modern construction of such buildings. In the upper front story of this building the general offices have been located. They afford a full view of the shop, are light and conveniently arranged, with private offices for the president and heads of the various departments.

About \$20,000 worth of new machinery has been added, including a large electric traveling crane



BUILDINGS OF KAY-PIM MANUFACTURING COMPANY AT ST. LOUIS.

Wheeler & Co. retired from the elevator he was placed in the state grain inspection department, which position he filled until this discharge.

Si. Kendall gives up his position on the committee of appeals, state grain inspection department, to take the place of William Bidwill as supervising inspector, at South Chicago. Prior to his membership on the committee of appeals he was superintendent for the McReynolds Grain Co. He has been connected with the grain trade for about twenty years.

PUBLIC WAREHOUSES FOR RICE.

The rice interests of Texas will endeavor, at the current session of the legislature, to secure legislation on the form of a public warehouse law which shall provide that all warehouses handling grain (including rice) for profit shall take out a state license and give a bond, thus becoming public warehouses in the sense that they are subject to the regulations laid down by the Railroad Commission. It will be made compulsory upon all such warehouses to receive, so far as is possible, all grain tendered them (which shall have first been passed upon by the official inspector and weighed by the public weigher), to store the same at a price set by the Commission and to deliver the same grain or the same quantity and quality upon demand of the holder of the receipt, after charges fixed by the state shall have been paid.

This warehouse receipt will be backed by the bonds of the warehouseman, the state inspector

prior to 1870, is a history of the movement, begun in Illinois, to put the carriers of this country under state control. The beginnings of this great reform appear first in the constitution of 1871, a statement of which Mr. Gordon follows with a narration of the course of legislation, beginning in 1871, and the subsequent creation of the Illinois Railroad and Warehouse Commission and the litigation that grew out of the attempts to enforce these laws—all most interesting reading at the moment when the principle of state control is on its trial of strength in Congress.

Mr. Paine's "Granger Movement in Illinois" is excellent. Thorough, but not prolix, the history of the Illinois Grange is followed from its organization and its growth is traced from the formation of the first grange organized at Washington City in 1868, down to April of the present year. Grange legislation in Illinois is reviewed under the subject of "The Grange and the Railroads," and the influence (real and mythical) of the grange upon readjustment of railroad rates is pointed out. This study will especially interest those farmers who at this moment are trying to repeat old blunders by co-operative schemes of handling grain, running stores, etc.

Philadelphia grain dealers expect a larger export business in corn from now on. As early as January 6 all the available space on outgoing vessels was engaged until the latter part of February, and freight rates were firmer than at any time for many months.

which runs the full length of the shop. With these additions the company has every facility for filling promptly their grain elevator and mill orders, of which there has been a steady growth since the business was first established.

The foundry and power house, as formerly, join the machine shop and sheet metal work shop, in the rear. The plant is operated by electricity, each department being furnished with its separate motor which can be run independently of all others.

The designer of the new buildings and superintendent of the new arrangements was the president of the company, A. H. Kay. The grain trade needs no introduction to Mr. Kay, as he has been manufacturing, or has been associated with the manufacture of, grain elevator and mill machinery for the past eighteen years and has practical ideas on the construction of modern conveying and grain-handling machinery, by which the trade has benefited. Nothing but the best can be expected from the new plant; and if the best of shop machinery that money can purchase and skilled mechanics to operate them count for anything, this expectation will be fully realized.

The maximum of wheat in store at Minneapolis this season reached nearly 14,704,000 bushels on December 30, being the largest accumulation of wheat ever known at that terminal. On current crop of wheat, Minneapolis has received a greater share than she did of last crop, while the portions allotted to Duluth, Chicago and Milwaukee have

been smaller than they were on the crop of 1903, Minneapolis having, this year, to December 30, drawn 51,694,000 bushels as compared with 50,614,660 in the corresponding period last year.

[For the "American Elevator and Grain Trade."]

THE BITTER MUSTINESS OF OATS.

BY CARL S. SCOFIELD.

During the two years last past, grain dealers have had considerable trouble with a sort of bitter mustiness of oats, that has been bad enough to

beyond all doubt. In his experiments with cultures of this fungus, the author found that it was not able to survive very high temperatures; a fact that indicates a simple means of preventing the rapid spread of the disease in case it becomes troublesome. In addition to studying the badly diseased samples, the author carefully examined and made cultures from a large number of samples of oats that were presumably perfectly sound and free from the disease. In practically all the samples examined the disease was found to be present to some extent; so that the conclusion was reached

both before and after treatment, are not recorded. It would be, however, a very simple matter for any grain dealer who may have any of these bad oats on hand to try heating them to see if such treatment is at all effectual. In case it is found to be so, large quantities of the damaged grain could be given effective treatment in any ordinary grain drier.

The account of these experiments is offered here in the hope that the suggestions they give may be useful in case any trouble is experienced with this bitter mustiness in this year's oat crop. The writer will be glad to receive from any source (directed to him in care of the Department of Agriculture at Washington) samples of oats that are presumably infected with this bitter mustiness, together with any information obtainable regarding the source of the grain and the special treatment, if any, that it may have received.

COMMERCE COMMISSION REPORT.

The annual report of the Interstate Commerce Commission was sent to Congress on December 19. It covered many important phases of the transportation problem, including the private car iniquity, accidents to passengers and employes, etc., but the major and most interesting part of the report was devoted to a consideration of the amendments to the commerce act now before Congress. This portion of the report may be condensed as follows:

The Commission calls attention to the fact that there has been no amendatory legislation conferring on the Commission power over rates and making the orders of the Commission effective. In the present state of the law, after careful and often extended investigation, the Commission may find a rate complained against to be unreasonable, and order the carrier to desist from charging that rate for the future, but it cannot, though the evidence may and usually does indicate it, find and order the reasonable rate to be substituted for that which has been found to be unlawful. Any reduction of the wrongful charge amounts to technical compliance



AN INTERIOR VIEW OF THE KAY-PIM MFG. CO.'S SHOPS.

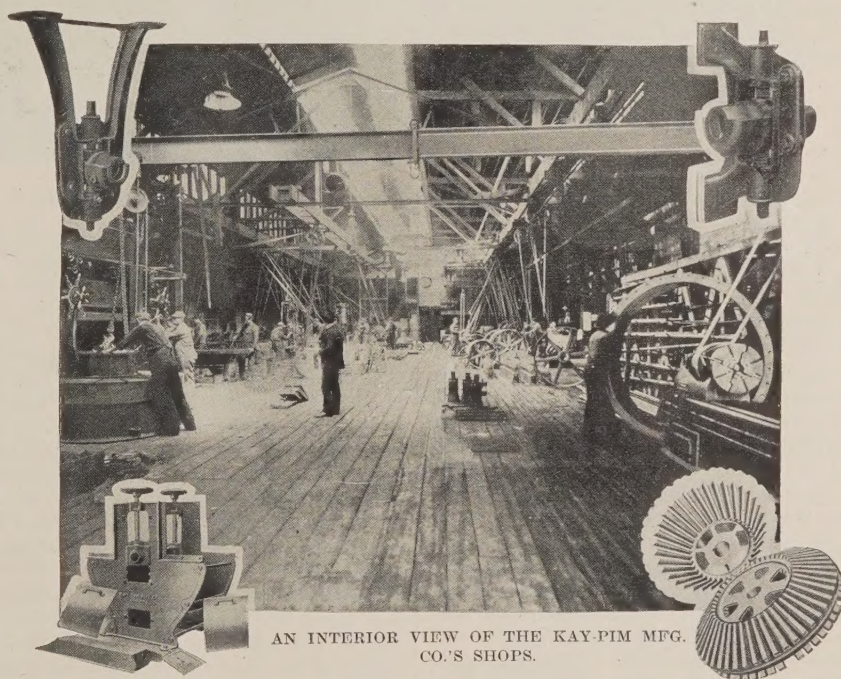
cause horses to refuse to eat some of the worst lots. Several such samples have been submitted to the Department of Agriculture for examination as to the cause of this peculiar mustiness; for it is obviously very different from the common mustiness which does not injure the oats seriously for feeding purposes. The samples received by the department were carefully examined microscopically and compared with similar samples that, though apparently equally musty, were said to be readily eaten by horses. These seriously injured samples showed no striking difference from the others, either with the microscopical examination or when fungus cultures were made from the various spores found on the outside of the kernels.

In view of the rather discouraging results thus obtained in the preliminary investigation of this subject, nothing further was attempted by the department at the time these samples were sent in. In a recent number of a French botanical journal there has appeared an article* that should be of considerable interest to any grain dealers who may experience in the future any difficulty of this sort with oats.

The author learned that horses refused to eat certain lots of musty oats, and he set to work to find out the reason for such discrimination. A preliminary microscopical examination gave but scant results; and it was only after trying a number of different artificial culture substances that he found one on which he could produce a good growth of the fungus that appeared to be the cause of the trouble. He succeeded in getting pure cultures of about a half dozen different molds and bacteria that are found commonly on most seeds, and one of these only gave the peculiar odor that was recognized as belonging to the seriously damaged oats.

Further experiments showed that this fungus was probably the only cause of the real damage, although it is to be regretted that no feeding experiments were undertaken to settle this question

that the spread of the disease is determined by the conditions to which the oats are submitted after they are ripe. The opinion offered is that



AN INTERIOR VIEW OF THE KAY-PIM MFG. CO.'S SHOPS.

where bundles of the grain are permitted to lie on the damp ground for some time after harvest disease is very likely to develop sufficiently to cause horses to refuse to eat the oats.

Some experiments were also undertaken to find a way of treating infected samples so that they could be used for feeding purposes. It was found that if badly infected samples were heated to a temperature of 175 degrees Fahrenheit, and kept at that temperature for about half an hour, the odor seemed to be entirely driven off. Unfortunately actual feeding experiments of the grain,

and frees the carrier from any legal obligation under the order. The Commission can condemn the wrong, but it cannot prescribe the remedy. Two cases of unreasonable rates decided during the year are cited as showing some reductions from the rates found unreasonable, but which were not so great as those recommended by the Commission.

Carriers are entitled to ignore the order of the Commission and await the judgment of the Circuit Court upon a petition by the Commission and another trial of the issues in that court. The more important the case may be, the greater the benefit

*Sur un Streptothrix Cause de l'Altération des Avoines Moises, par M. D. Brocq-Rousen: Revue Générale de Bactériologie, 16; 219-30, plate 17; 1904.

conferred upon shippers or communities, the less likely is the order of the Commission to be obeyed. The Commission must not only render a just decision, but one that is convincing to the carrier, to afford the relief from unlawful rates contemplated in the statute. If the decision of the Commission is right, the public is entitled to have it go into effect; if it is wrong, its operation could be enjoined upon showing to that effect by the carrier in a suitable and summary proceeding in the federal court. The amendments to the statute recommended by the Commission involve no fixing of whole tariffs of rates in the first instance or at any time, but simply the redressing of transportation wrongs shown to exist after full investigation, during which all affected interests will have been heard; and when an order is issued against a carrier under such procedure, it should by operation of law become effective upon the date therein specified.

In the fixing of rates by carriers upon all commodities for transportation in all directions and between all points reached by railroads, it is inevitable that much injustice, unfairness, unreasonableness, preference and discrimination will be practiced, notwithstanding the greatest care and ripest judgment may be exercised by the railway officials. These errors of judgment on the part of the railway officials constitute the reason for federal regulation and are the basis of the present widespread demand for an amendment of the existing statute which will enable their speedy correction.

The Commission alludes to the persistent misrepresentation by many who are interested in opposing this legislation, that the amendments desired would confer upon the Commission the power to arbitrarily initiate or make rates for the railways, and that it would be most dangerous to place this vast authority in the hands of five men, especially five men who have had no experience as railway traffic managers. No such power has been asked by or is seriously sought to be conferred upon the Commission. Though the popular demand may eventually take that form, under the stress of continued delay in remedying ascertained defects in the present plan of regulation, the amendment recommended by the Commission, as to the authority to prescribe the reasonable rate upon complaint and after hearing, would confer in substance the same power that was actually exercised by the Commission from the date of its organization, in 1887, up to May, 1897, when the United States Supreme Court held that such power was not expressed in the statute.

The law provides for a complaint, full hearing, a report and opinion, and an order. This proceeding is essentially judicial in character and form, and bears no resemblance in any degree to the arbitrary action which would result under authority to make tariffs of rates absolutely for the railways, either in the first instance or after some form of hearing or investigation. The situation is regarded as increasingly grave, in view of the rapid disappearance of railway competition and the maintenance of rates established by combination, attended as they are by substantial advances in the charges on many articles of household necessity. Though the law is extremely defective, aggrieved shippers have no other recourse than to appeal to the Commission, in the hope of some relief from conditions which they regard as intolerable.

All concede that rates should be reasonable and just. When they are not so, there is now no adequate means of making them reasonable and just unless the carrier can be convinced and persuaded to do so. The interests of one party cannot be safely relied upon to determine and protect the rights of another. Authority to require the establishment of joint through rates over connecting and continuous lines is also believed to be necessary, if authority to correct an unreasonable or unjust rate should be granted.

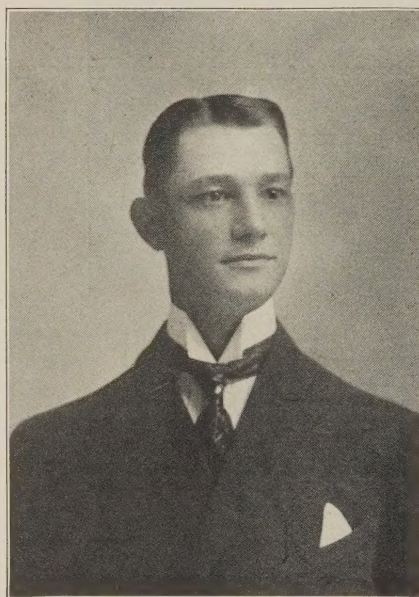
The term "Inland Empire" is a very elastic one. Its scope depends upon the idea which the particular writer entertains or the amount of country he

desires to include within his immediate purpose. Properly speaking, however, all territory which is tributary to the Columbia River, and whose products naturally find a market in the direction of its course, combines to form the immense section which has come to be known in general terms as the "Inland Empire." Its boundaries are not arbitrary nor well defined, but nevertheless, popular custom has given the name to the vast region that is drained by the great river of the West.

H. M. SCHEER.

No successor was appointed to the late Charles B. Tyler, as chief grain inspector at Newport News, Va., until December 1, owing to the fact that the port was doing very little grain export business because of inadequate crops. However, when the new crop corn began to move, the carriers to and abroad from Newport News resumed their grain business, and H. M. Scheer was on the date named appointed as chief inspector.

Mr. Scheer was selected from the employes of the New York Produce Exchange inspection department, according to the practice at Newport



H. M. SCHEER, NEWPORT NEWS, VA.

News, for as its export business is done largely through the New York Produce Exchange, it is desirable to have as inspector at the export a man trained in the New York Department and thoroughly familiar with New York grades and practice.

As Mr. Scheer is one of Chief Inspector G. H. K. White's young men, trained by him and employed in his department for many years, there can be no question of his ability as inspector or character as a man and gentleman. It is also safe to say that as Mr. Scheer is quick in his judgment and thoroughly confident of himself and the accuracy of his knowledge of grain, the Newport News interests have made no mistake in their selection of an inspector.

It might be added that with Mr. Scheer at Newport News and Seth Catlin (also trained by Mr. White) at Boston, there need be no personal difficulties in the way of "uniform inspection" at Atlantic Coast ports whenever the trade wishes to have it.

ALFALFA MEAL MILLS.

The alfalfa meal mill, which first appeared, we believe, in California, has found a "local habitation and a name" in Kansas and Nebraska; in the former state at Wichita, and in the latter at Alma and Superior. Another is talked of at Mankato, Kan. In both states these mills will undoubtedly have a stimulating effect on alfalfa production. The mills, it is remembered, in a measure, supplant the baling of the hay, which, because of its natural char-

acteristics, is not so well adapted to transportation in the bale as other grasses, as it naturally pulverizes with handling, when dry, and therefore suffers serious waste. The mill, therefore, first cuts the hay into short pieces which go to the grinder and are pulverized. It is then binned or bagged for shipment. The product is shipped pure or mixed with corn, oats, seed meal for feeding to poultry and stock, without further manipulation by the feeder.

The demand for the meal is said to be excellent, and already the Nebraska mills have added somewhat to the value of the hay per ton at the farms.

It is to be noted that alfalfa production is attracting more attention in states or parts of states not included in the so-called semi-arid portions of the West since the discovery of the science of soil-inoculation which makes alfalfa a practically sure crop wherever it is sown on lands at all adapted to it; and once a field is established, the plant being a perennial, there is no need of renewing unless one desires, as all good farmers do, to rotate and give to other crops the benefit of the soil improvement wrought by the alfalfa itself.

[For the "American Elevator and Grain Trade."]

RIGHT OF POSSESSION WHEN BILLS OF LADING ARE EX- CHANGED FOR CERTI- FIED ORDERS.

BY J. L. ROSENBERGER,
A Member of the Chicago Bar.

Certain cars of grain were consigned to one Archer at Newark, N. J. Prior to their arrival he contracted to sell them to different purchasers, and surrendered the bills of lading to the local freight agent at Newark. Upon the surrender of the bills of lading he presented orders directing the delivery of the cars to the several purchasers, "or ourselves or order, on presentation of this order." Upon these orders the local freight agent stamped the words, "Car to be delivered on this order, same as B. of L. B. of L. taken up at Newark." Archer retained the orders thus certified, drew upon the purchasers for the price of the grain, payable on arrival, and obtained advances from a bank upon the drafts accompanied by the certified orders.

The Court of Errors and Appeals of New Jersey holds (National Newark Banking Co. vs. Delaware, Lackawanna & Western Railroad Co., 58 Atlantic Reporter, 311) that the contract between the purchasers and Archer was what is termed an executory contract (one to be performed in the future), and not a present bargain sale. The transaction with the bank transferred to it a title to the grain. A carrier must deliver goods to the true owner, claiming under the consignee, when it has notice of the owner's rights and the bill of lading has already been surrendered. The certified order in this case amounted to notice of the bank's rights. Notice of the rights of a person claiming title under consignee to have the goods delivered to him, when given to the agent of the carrier charged with the duty of delivering freight, is notice to the carrier.

The court says that the case presented this situation: A consignee sells goods in advance of arrival, and gives an order for their delivery, which is known to the local freight agent of the carrier, and subsequently orders the carrier to deliver the same goods to another person, and the carrier complies with the later order. There can be no question that if the carrier delivers the goods to the true owner, claiming title under the consignee, such delivery is a good delivery. The only question that has arisen as to the carrier's right to deliver to the true owner has arisen in cases where a bailee has delivered to an owner claiming adversely to the bailor; and it is now well settled by many cases that if the bailee has performed his legal duty by delivering the goods to the true owner, at his demand, the bailee is not answerable to his bailor; and this rule is especially applicable to common carriers, who must carry for all who offer.

If the bailee is justified in recognizing the right

of the true owner claiming adversely to his bailor, much more is he required to recognize the right of the true owner claiming under his bailor, as in this case the bank claimed under Archer. The position of the bank was not merely that of the true owner, for it had an order of the consignee for delivery of the grain; and there could be no doubt that the carrier, having in its possession the bill of lading, if it had not already delivered the grain, must deliver upon that order. The question was whether the carrier was protected by the delivery under the later order. Although the duty of the carrier required a delivery to the true owner when known, it could hardly be disputed that in the absence of a third person's rights the carrier would be justified in delivering to the consignee, who was *prima facie* entitled to receive the goods; and, if it would be justified in delivering to the consignee, it must be justified in delivering on the consignee's order. The rights of the bank depended upon whether the certified orders were orders for delivery to the bank and were known to the railroad company prior to the delivery to the other purchasers.

Those orders, when presented to the freight agent of the railroad company at Newark, directed a delivery either to the purchaser or to Archer or to Archer's order, "on presentation of this order." The very fact that Archer had the orders stamped with the words, "Car to be delivered on this order same as B. of L.," and took them away with him, was notice to the freight agent that some use was to be made of the orders other than merely to direct a delivery by the railroad company. Had such been the only purpose, it would have been unnecessary for Archer to have the orders certified or to take them away with him. It would have been enough to leave the bills of lading with the company, and afterwards send such instructions for delivery as Archer actually gave in favor of the subsequent purchasers. By certifying these orders, the agent virtually accepted them. If he was authorized to accept for the company, the company became bound by the acceptance. If he was without such authority, still the terms of the orders gave him notice that the grain was no longer deliverable merely to the consignee or upon his order, but was deliverable only upon the presentation of the certified orders. To that condition the consignee had himself consented and the railroad company would have been entirely justified in refusing delivery on any other terms.

It was true the certified orders did not name the persons who were to receive the goods, but they described them in such a way that no mistake could be made. The orders amounted to saying: "Deliver the grain to the man who presents this order; it will be either Bradner [or any other purchaser], ourselves, or someone with an order from us." The freight agent, when he indorsed the order, had notice that the grain might not be deliverable to Archer upon its arrival; he also had notice that it should be delivered to someone who would be identified by the possession of the certified order. Such a method of identification was as safe for the railroad company as an identification by name. The agent knew that the person who would be entitled to receive the grain must answer two descriptions: (1) He must have the certified order; (2) he must be either the purchaser named in the order, the consignee himself, or someone with the order of the consignee.

The bank complied with both terms of the description. It had the certified order, and the indorsement of Archer thereon. Notice to the freight agent was notice to the railroad company. It was notice to the very person who was charged by the railroad company with the duty of delivering the grain. The bank's right did not rest solely upon a contract made by the freight agent to deliver the grain to the holder of the certified order. Its right depended upon the facts that it was the true owner of the grain, and the holder of the token which the consignee had notified the railroad company was to determine the question to whom the delivery should be made.

So a judgment in favor of the bank was affirmed.

MANKATO MALTING COMPANY.

The Mankato Malting Company of Mankato, Minn., of which O. Bierbauer is president and manager, was formerly known as the Mankato Malt and Grain Company, which has done business in Mankato for a number of years, handling malt and barley in what is now one of the best barley sections of the Northwest. This grain is here at its best, and the quantity may be guessed from the statement that Mankato alone handles about 6,000,000 bushels annually.

Such a point is an ideal one for a malting plant, and during 1904 Mr. Bierbauer erected at the junction of the four railway lines running through Mankato the very complete malting premises shown in the accompanying engraving, built and equipped by the Dornfeld-Kunert Company of Wauertown, Wis.

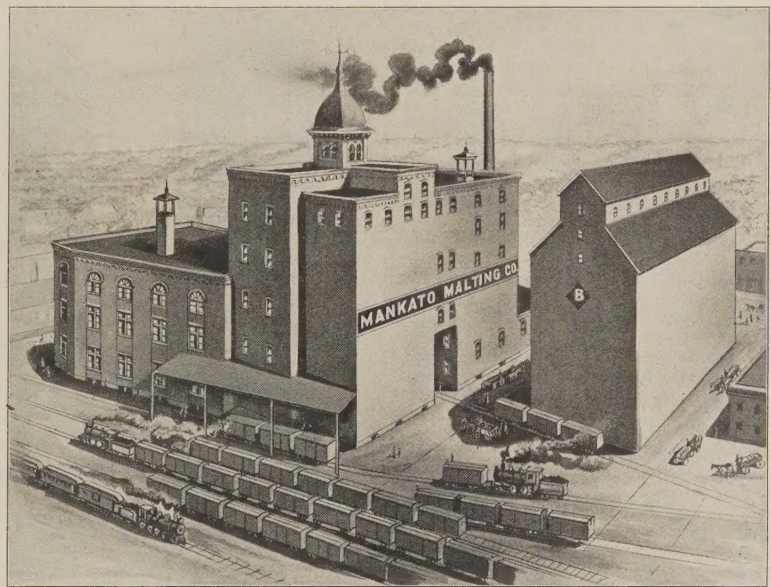
The plant is equipped with the most improved malting machinery of the Dornfeld Patent Drum System arrangement throughout, consisting of eighteen malting drums, each 22 feet long and 11 feet in diameter, giving each a capacity of 750

lation. Stock Exchange is too busy with "Frenzied Finance" to deprive the devil of his quotations. Associated press should be encouraged to devote more space to the markets. Boards of Trade should progress; will Chicago step forward?—C. A. King & Co.

TRACK SCALES IN KANSAS.

Chief Grain Inspector J. W. Radford of Kansas, in making his annual report to the Kansas state legislature, will recommend the passage of a law that shall require all public elevators to provide and use track scales for weighing grain, to replace the hopper scales now in use. In addressing E. J. Smiley of the Kansas Association on the subject, Mr. Radford, among other things, says:

I am not trying to secure any notoriety from anything that I may recommend. It has been my aim to recommend and put into practice whenever practical any reforms that in my judgment were for the benefit of the department. It has not been my practice nor my desire to go to the housetops and make these announcements for the purpose of notoriety. I feel that the department has made many sub-



MALT HOUSE OF THE MANKATO MALTING CO., MANKATO, MINN.

bushels of barley. The drums are supplied with hydraulic drives and automatic watering machines. An artesian well, furnishing over 18,000 gallons of water per hour, with average temperature of 49 degrees F., is one of the great advantages of this plant. The water is absolutely pure and in every particular adapted to malting purposes.

The kiln is of the latest patented design, with improved dumping floors of ample capacity and automatic malt turners. The upper kiln floor is provided with Dornfeld Patent Air Tubes, for regulating and controlling the temperature of the air passing through the malt at all stages of drying. The entire plant is arranged and operated in the most economical manner, working either on the six- or eight-day germinating plan, as may be required by the nature and quality of the barley, and the results obtained are of a high order.

Loading and unloading is done by automatic machinery of improved style. The adjoining elevator is of large capacity and equipped with ample handling machinery throughout.

Speculation in grain appears unpopular. Why? The country is richer than ever before; more people are directly interested in grain and products, but the volume of trade is smaller than years ago. Is some radical change in methods necessary to make the markets more attractive? Should there be a uniform grade? Should the inspection be kept out of politics? Elevator companies should be compelled to deliver out an average of the grade they take in. They are at Toledo. Bucketshops are a cancer which can be removed only by national legis-

stantial gains in the last two years and that there is still room for it to improve; and one of the recommendations that I am making is the use of track scales at all public elevators, where official weights are taken, instead of the hopper scale.

Now, I could deal at great length with the question of scales, showing the advantages and disadvantages; but I do not think it is necessary. With the chances for shortages to occur in the business of handling grain without being able to definitely fix the blame, it is certainly advantageous to have matters simplified as much as possible instead of being complicated. It is my opinion that platform, or track, scales should be used, even though state weights are not taken, for many different reasons.

A hopper scale has all the opportunity—runs all the chances—of being out of form that a track scale does, where the track scale is covered with a shed; and in addition to that the vibration caused by machinery almost always interferes more or less with the accuracy of the hopper scale, which is not true with the track scales. A hopper scale in the center of an elevator, away up next to the top, is subject to leaning and settling, which is not true with the track scales.

I take it for granted that operators of elevators are anxious to be able to tell whether their scales are wrong, or whether the shortage is caused from other sources; and with a complicated set of hopper scales it is always hard to determine what the trouble is. It may be that the scales are out of line, or it may be something is wrong with the boot; or it may be some defect in the leg or elevators; it may be something wrong with the head or spout, or it may be something wrong with the garner or hopper or the slides—any of these conditions might exist for an indefinite time in a small way and be a very hard matter to detect. The elevator might be getting the worst of it or the best of it, and really not know it.

As I said before, I take it for granted that all want to be able to know at least what the conditions

are; and I most emphatically insist that that is best done with the track scales.

On the question of the supervising of weighing and issuing an official certificate, I do not need to introduce any testimony, or make any argument to you or any other man familiar with a modern elevator, to make the point clear that such work is beyond the power of any one man with hopper scales in an elevator to do it all. I have placed two men at each of the large elevators—one on the ground to see that cars are properly unloaded and the grain swept into the pit and all of it elevated out and to so notify the man who does the weighing upstairs; yet there are always many chances for incorrect weights; in fact, if I should install four men at each elevator, who were all competent and industrious, I would not have assurance of their certificate being as correct as though I had one man doing all this work on a track scale. You will realize that there is nothing so simple in the way of weighing as to have your scale in balance performing correctly, then put on your car; get the weight, empty out the grain and weigh back the empty car. It is indeed a simple and a most satisfactory method of ascertaining the contents of a car.

A great many elevators in the country have track scales, and I understand a good many more are willing to put them in; and as the agitation for the reduction in fees for this business is on, I consider it very appropriate at this time to address you on this subject and to say to you that in the past twenty months my department has weighed approximately 75,000 cars. Reduce the fee by 25 cents a car and it would mean \$18,750 saved, or enough to pay for the installing of ten sets of good modern track scales. Now, if they want to reduce the fees, this is a first-class way to do it, as the saving in fees in a short time at an elevator doing business will pay for the new scales. And I will recommend to the coming legislature that a fee of 25 cents per car is ample to insure perfect inspection and supervision of weights, backed by a certificate second to none in the country, if done over a modern up-to-date track scale.

Now, if we were to take the position that the elevator man should take—that is, to have our weights inspected—why not have thrown around the business the greatest safeguards possible to insure correct weighing that would also tend to perpetuate the good name of the elevator, instead of having it brought in question?

Taking the side of the official weigher, how much more satisfactory it would be to have a device for their use that is simple, reliable and at all times subject to careful examination. If the mechanism of this kind must be so complicated that the operator is not able to certify to correctness at all times, why have any official weights at all? Or, in other words, if official weights are to be had, give the man who is doing the weighing an opportunity to say positively that his weights are correct. If this cannot be done I insist that there is no need of having any supervision at all. Just as well let the man who ships, or the man who receives, weigh and force settlement accordingly.

Another very important feature, closely connected with this question, in my judgment, is the injustice that might be done the common carrier. In this way, for instance, under the present practice, I find thousands and thousands of cars per year arriving at elevators to be unloaded, apparently in a leaking condition. Now, it is often the case that these cars have gotten into that condition only a few minutes before my men find them; while they bear evidence of having leaked, there is no way to tell how much. My department makes out a leak report and turns it in to the consignee. It may be that this car has lost no grain whatever, yet if there is any mistake made in weighing, the report of the car having been out of condition on arrival is prima facie evidence that the railway company is at fault. It is not my desire, nor do I think it is the desire of any shipper or receiver, to have the railroad company, or anyone else, blamed for shortages that they are not responsible for; but it does interest me, as it should everyone connected with the business, to be able to place this blame where it belongs. Then each would not only stand his share of the damage, but be able to readily get at the seat of the trouble and remedy it at once, which would result in the betterment of conditions, fewer complaints, less dissatisfaction and more confidence in the supervising department and more confidence in the market.

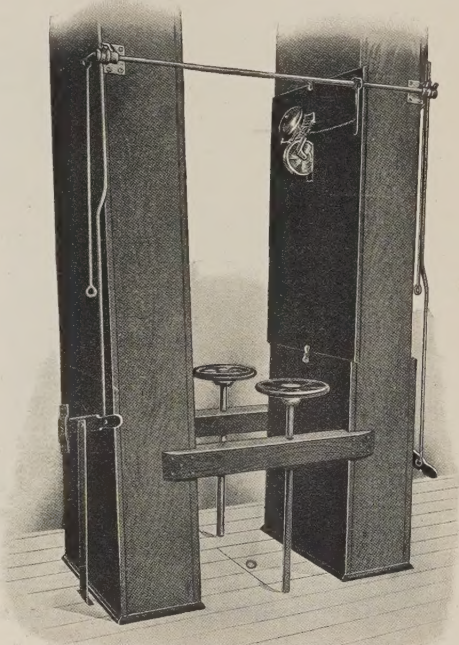
Mr. Smiley has referred the letter of Mr. Radford, with an endorsement of it by H. Parker of McPherson, to the grain dealers of Kansas, requesting the opinion of each on the question, and also recommending to those who approve of it to see the representatives from their districts and ask them to support such a measure when presented to the next legislature. "You can readily see," adds Mr. Smiley, "that if track scales are

placed in all terminal elevators the fee for weighing can be reduced one-half and better service secured. If you ship only one hundred cars of grain per year, it will mean a saving to you of \$25, and in all probability a greater amount in weights."

THE IMPROVED ANTI-CHOKE ALARM MACHINE.

The accompanying illustration shows a machine which has proven indispensable in grain elevators in which it has been installed, and whose use has saved elevator owners both time and money. There are really two machines—the Anti-Choke Alarm Machine and the Alarm Machine—and they can be purchased together or separately.

If a man should see a leg choking he would close the feed gate. The machine cannot see, but it knows when a choke occurs and does the work of a man more promptly than the man himself would do. There is this difference, also, between the machine and the man, that the former is always attending to its business; very often the man



IMPROVED ANTI-CHOKE ALARM MACHINE.

is not. The machine sounds an alarm gong also during the time that the belt is running below speed.

The machine is strongly made, wholly of metal, and combines delicacy of action with durability and attractive appearance. Each part is interchangeable, which fact admits of making repairs without difficulty in case of accidental breakage. The gongs have a strong tone that can be readily heard in any part of the working floor of a terminal elevator, making it possible for one man to operate ten or more legs at the same time with perfect safety.

In the country house the gong can be heard any place about the premises—in a car, a coal shed or in the street nearby. The buyer can leave his elevators working and attend to any other duties, uninterrupted by trips to inspect the legs.

If a machine were connected with a leg having a normal speed of 600 feet per minute, and it was desired to have the gates closed, in case of a choke, when the speed had fallen to 500 feet, by a simple adjustment the machine would be made to act at the last-named speed. Thereafter that point could not be passed without the gate being instantly closed. The gong is continuously sounded during the period of slow motion, but it automatically ceases when the speed rises above the point at which the machine is not to act.

The principal claim for the machine is its perfect working quality in the dust, dirt and cold, without

cleaning or other care. The adjustment is securely locked and cannot change of itself.

The Alarm Machine is the wheel head of the Anti-Choke Alarm with the parts removed that connect it with the gates. Its duty is to give instant and loud notice of slow motion. The machine is wholly automatic, requiring no attention from year to year, except to oil. It may be set to sound the alarm before a leg has lost 25 feet of its speed, or at any other desired point. The machine is recommended for legs that are fed by conveyors wholly, those that have no gates and those that have poor gate arrangements.

The machines are used extensively in country elevators, on account of cheap price and ease of installation. Cutting a slot through the leg casing and screwing the spring hinge to it is all there is to installing them. If the alarm should be ordered and the full machine should later be wanted, the gate attachments can be ordered later. They go in place without trouble, and the change can be made, except installing, in five minutes.

The shipping weight of the Anti-choke Alarm Machine is 25 pounds and of the Alarm Machine 15 pounds.

For further particulars address the manufacturers, the Central Machine Works Co. of Minneapolis, Minn.

WHAT SHIPPERS DEMAND AS TO RATES.

BY E. P. BACON,

Chairman Executive Committee, Interstate Commerce Law Convention.

The movement for the amendment of the Interstate Commerce Law had its inception upward of five years ago in the preparation of a bill intended to remedy a number of defects developed in the working of the law referred to, upon the initiative of the Millers' National Association, the particular incentive of which was the desire to remove, if possible, a serious discrimination which existed in rates charged for the transportation of wheat and flour in favor of wheat, in consequence of which the manufactured product was subjected to a serious disadvantage, wheat being carried at a much lower rate than flour and resultant milling products—the effect of which was to largely reduce the exportation of flour in proportion to the exportation of wheat.

In other words, the manufacture of the wheat produced in this country was transferred, to a large extent, to foreign countries. The discrimination had been brought to the notice of the Interstate Commerce Commission, and after a thorough investigation of the subject a decision was rendered by the Commission to the effect that no warrant was found for a greater charge for the transportation of flour over that for wheat than two cents per 100 pounds, based on the rate from upper lake and Mississippi River points.

This occurred subsequent to the rendering of the decision of the Supreme Court of the United States, in 1897, declaring that the Commission was without authority to determine what change should be made in a rate found to be discriminative or unreasonable, its authority being limited to the finding of the fact that a rate complained of is in violation of the provisions of the interstate commerce act and the notifying of the carrier "to cease and desist" from such violation. The Commission consequently was precluded from issuing any order in the case, but it was thought that the opinion expressed by the Commission would be respected by the carriers. Such, however, proved to be the case only to a partial extent, not sufficient to afford any practical relief to the milling interest, and it soon came to be wholly disregarded.

The Millers' National Association thereupon procured the preparing of a bill, as above mentioned, which was introduced in the Senate in the first session of the Fifty-sixth Congress, in December, 1899, by Senator Cullom, and was known as the "Cullom bill." It had been indorsed by a con-

vention of delegates from national, commercial and manufacturing associations held in Chicago the preceding month, called for the purpose of considering it. No action having been taken upon it at that session, another convention was held in St. Louis in November, 1900, consisting of delegates from state and local organizations of the character mentioned, as well as of national organizations, which was called for the purpose of promoting the passage of the bill named, and was termed the Interstate Commerce Law Convention.

The bill having failed of passage in that Congress, a modified bill was prepared and its passage advocated in the Fifty-seventh Congress, with no better success. A still simpler bill was prepared and introduced in the present Congress in December, 1903, in both houses, known as the Cooper-Quarles bill, comprising the single provision conferring authority upon the Interstate Commerce Commission to determine what change shall be made in a rate complained of, found upon full hearing to be discriminative or unreasonable, such determination to go into effect within thirty days, subject to review upon application of either party by a Circuit Court of the United States given jurisdiction, the court being empowered to suspend the order pending the hearing of the case if in its opinion the order is clearly unlawful or erroneous. The decree of the Circuit Court may be appealed to the Supreme Court within thirty days, but is not stayed or suspended by such appeal.

No action having been taken by Congress on this bill, a second Interstate Commercial Law Convention was held at St. Louis, October 28-29 last, for the purpose of adopting measures to secure its passage, if possible, at the present session.

There were 306 delegates present, representing 169 associations, embracing various branches of trade and industry in all parts of the country.

A memorial to Congress was adopted, urging the speedy enactment of "such legislation as will insure the enforcement of the primary requirement of the aforesaid (interstate commerce) act, namely: That all charges for any service rendered or to be rendered in the transportation of passengers or property or in connection therewith shall be reasonable and just."

Under the interpretation of the Supreme Court above referred to there is absolutely no means for the enforcement of this provision. The Commission can go no further than to declare, as stated above, that it finds the rate in question to be in violation of the act, and it is left to the carrier to make such change therein as it may see fit. This, of course, is utterly futile, and places the law in a state where it becomes fitly a subject of ridicule. It is to relieve it from this condition that the commercial interests of the country have united in the effort to secure the legislation indicated.

The proposed legislation has been referred to in the press to a considerable extent as conferring upon the Interstate Commerce Commission the "rate-making power," which is an utter perversion of what is contemplated, as will be readily perceived from the outline above given of the Cooper-Quarles bill, introduced at the instance of the commercial organizations associated in the effort to secure this legislation. It is merely a supervisory power over rates established by the carriers that is sought, which can be exercised only upon complaint, in a particular instance, after full hearing of all parties in interest, and the action of the Commission must be in accordance with the evidence produced and with the provisions of the Interstate Commerce act.

I know of no one who desires to have the Commission invested with power to make rates primarily for the railroads of the country or who believes that it is possible for any body of men smaller than that now engaged in the work to do it. Nobody that I know of proposes to take the initiative in rate making from the hands of the railroad officials now exercising it, where it properly belongs. But the purpose is to place the

power of supervising rates so established, when their justice or reasonableness is challenged, in the hands of a disinterested body of men constituted by law for the purpose, whose determination shall have speedy effect.

It is asserted that this is too vast a power to be intrusted to any body of five men; that it might be exercised to pull down one community and build up another, or to benefit one interest at the expense of another, and in various other direful ways. That it is a vast power cannot be denied, but vastly greater power is now in the hands of less than a dozen men, who control two-thirds of the railway mileage of the country, which they are free to exercise in such manner as their own interests may dictate, without responsibility to the government or to the people in any way, and without any practical means of redress on the part of the people, however unjustly or oppressively it may be exercised.

Is it right that this state of things should be permitted to continue, while the work is going steadily on from year to year of bringing the entire railway mileage of the country under the control of this dozen men or less?

If we cannot trust five men appointed by the president and confirmed by the Senate for long terms of service to do justice to all concerned, what shall we say of the courts of the country?

It is further asserted that because the members of the Interstate Commerce Commission have not been trained in the traffic department of railways and that men so trained cannot be secured for the positions for the salaries attached thereto, they are not competent to pass upon the justice and reasonableness of rates established by railway officials. Nevertheless, railway managers have repeatedly publicly expressed their readiness to subject rates established under pooling arrangements, in case pooling were legalized, not only to the supervision of the Interstate Commerce Commission, but to the approval of that body prior to their being put into effect, with absolute power on its part to veto them; and, further, to grant to the Commission power to summarily annul any pooling contract found to work unjustly to the public or to result in impairing the efficiency of the service.

These conditions were formally assented to by the management of one of the most important railway systems in the country and were incorporated in a bill pending before the last Congress, which contained a section legalizing pooling. This does not seem to indicate any serious want of confidence, either in the competency or the fair-mindedness of the members of the present Commission.—N. Y. Herald.

BROOM CORN YIELD.

The Kansas Broom Corn Growers' Association's statistics of the crop for 1904, prepared by A. B. Olson, secretary, indicate a very short yield. The report says:

Reports from our representatives throughout the state indicate a crop less than 280 pounds per acre in Kansas and a tonnage in other states as follows:

Kansas	3,000 tons
Oklahoma	10,000 tons
Nebraska and Missouri.....	1,500 tons
Illinois	5,000 tons
Other districts	1,000 tons
Old stock	4,000 tons

Total available stock.....24,500 tons

We have from time to time been informed by manufacturers and their trade journals that the requirement yearly is from 40,000 to 45,000 tons. The question thus arises where shall the 15,000 to 20,000 tons come from?

About two months ago speculators and some manufacturers began estimating the Oklahoma crop at 60,000 tons, later they placed it at 40,000, later at 35,000, then to 25,000. I have lately seen estimates which give it as low as 13,000 tons, with but 25 per cent increase in its acreage, which give it 12,000 tons, and that it requires about seven acres, or about one and one-half acres more than last year, to produce a ton of broom.

Up to the present time very little has been said about the quality of the crop. As a rule the fiber

is fine and tough, but the brush is much shorter than the average crops. From our reports we are inclined to believe that too large a portion is spear and stemmy brush.

In spite of these conditions prices are not proportionately high, Illinois corn selling at \$70 to \$90, and Oklahoma-Kansas corn at \$50 to \$75.

OBJECTIONS TO MICHIGAN STATE GRAIN INSPECTION.

[From a paper read by H. L. Goemann of Toledo before the Michigan Grain Dealers' Association.]

Regarding the effort which I understand is being made in Michigan to have state inspection in this state, I think this a very unwise move. In the first place, there is no point in your state large enough, outside of Detroit, to justify the employment of capable inspectors; and when you have a state inspector at country stations where the business is light, as it is at the various points in your state, it would be impossible to get a capable man to devote his time to the grading of grain exclusively. You know what it usually means when a position is filled politically; and, taking the experience that Chicago has had in the matter of state inspection, I would certainly advise against having state inspection in Michigan.

Furthermore, you would find it difficult to sell to the consumer or dealer East on Michigan state inspection, as all Eastern markets would insist upon buying grain on terminal grade.

[Having discussed the movement for a national inspection law, and the effort of Capt. J. O. Foering and the chief grain inspectors to bring about uniformity of inspection rules and practice, Mr. Goemann continued:]

You will note from the above that in the states where state inspection is in existence it is impossible to conform to the grades as recommended by the Inspectors' National Association or as adopted by the New York Produce Exchange, and which, no doubt, will be adopted by the other seaboard exchanges; and from this you will see that unless your state should adopt the same rules, they would conflict with those of the markets to which you sell, and you would be at a great disadvantage in the selling of your grain. I think you would find that, while you might have state inspection in Michigan, you would still be compelled, owing to these conditions in grade, to sell your grain on terminal inspection.

You will also find that a good many transfer elevators have been built in the past few years at junction points east of here, through which a great deal of grain is passing. Some of these points have their inspection department under the local chamber of commerce or do the grading under their own supervision; and I want to say that these points will give you as honest, if not a better, inspection than the majority of large markets, for the reason that it is a business proposition with these transfer elevators to see that the shipper is protected on the grade, and, therefore, the inspector is compelled to give the benefit of the doubt to the shipper at all times. If the inspectors were lax and irresponsible, it would be only a short time until those points would get into disrepute with the grain shippers in general, and would, therefore, be unable to continue in business. So you can see that from a business standpoint the grade at these points must be kept fair and just, and this also applies to the weighing of grain.

Furthermore, let me add that if a little more care is taken by the shipper of grain to have his grain properly cleaned and in good condition, then a great many of the complaints that the shipper has against terminal markets will not exist; but because of the carelessness of the shipper in loading grain of irregular quality, the inspectors at the terminal market are compelled to reduce the grade of the entire car to that of the lowest grade in the car. With proper care and diligence on the part of the shipper to have his cars run uniform in quality and grain cleaned properly, you will find a much more satisfactory grading.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

1904.

The bull was feeling satisfied,
As the New Year came and the old one died.
His purse was full to the very brim
For fortune had been good to him.
"Good-bye, old year," he said, "good-bye;
No year has ever stood so high.
You are a peach from top to toe."
But the bear looked up and shouted, "No."
"I never saw a worse," he said;
The fact is, I am almost dead.
I'm glad you're gone." He heaved a sigh.
"Good-bye, old year," he said, "good-bye."
—Zahm's Red Letter.

A SUGGESTIVE INSURANCE CIRCULAR.

Editor American Elevator and Grain Trade:—

We inclose a circular proposition which the Grain Dealers' National Mutual Fire Insurance Company is going to try during the current year, having put it in effect on January 1. The object, of course, is the improvement of the risks, and more particularly the education of the men in charge in regard to the fire hazard. About 300 of the elevators we are insuring have already accepted the proposition.

Yours truly,

Indianapolis, Ind. C. A. McCOTTER, Sec'y.

To OWNERS: As an assistance to our system of inspections, at the October meeting of the directors it was decided that if there could be semi-monthly inspection of the risks and report by the individual in charge of each elevator, it would result in keeping the fire-fighting appliances in better condition and give more attention to the hazards and eventually a lower loss ratio. This work would have no bearing upon the policy contract and it is not practical to make it a requirement, but the adoption is left to each individual policyholder. However, as such self-inspection could be made to lighten the expenses of the field, and as it is believed that any expense would be more than offset by the lowered loss ratio, it was decided that where six reports had been made during any six months, a reduction could be made and charged to expense of 5 per cent of the assessment.

This office has done its work to the best of its ability and demonstrated a selection above the average; but the real success of the company is up to the policyholders in the prevention of fires.

If these self-inspections should result in preventing annually only one average loss of \$3,000, the company and the policyholders would be money ahead. It is believed that the result will average greater than 5 per cent, but on first trial the figure is made low. Everyone benefits by a low loss ratio, but the purpose is to give better results to those who see fit to make an extra effort to lower the ratio.

The plan is each month to supply a return reply postal card with a series of about eight questions, which can generally be answered by "Yes" or "No" and certified to by the signature that they are correct from personal examination. These, mailed to this office, will practically serve the same purpose as our inspector's reports by giving the exact conditions of the property. A card of instructions would be furnished employees for every risk, which would give the hazards to watch about an elevator, which every careful man would like to know. Except where the owner can make examination and desires to report, the company wishes the name of the foreman and reports by him.

The full advantages of this system cannot be explained in a circular. Our inspectors will visit the risk in the nature of auditors to check up the work. Should anyone be reporting erroneously, the fact will develop, and the property owner and the company will know it. Should anyone be negligent in reporting, notice will be given the owner, who can correct as he sees fit. Everything is optional with the owner, and credit will be given only where six reports are on file, made on or about the 10th of each month. Self-inspections are not part of the policy contract, and do not effect the policy. Many can get advantages out of the system, as all admit that other duties prevent sufficient attention to fire hazards. Where properties are not located at the main office, supervision of the safety of your property is had through this

office and the reports of your foreman. The repetition of these reports will be of value to every employee. In fact, there would be advantages in giving the 5 per cent discount to employees for extra care.

There is one disadvantage to the company. Any value in these self-inspections is of as much benefit to the balance of the insured and uninsured portion of the property as to its policy, yet it is the only one to give any return for the work done; but as long as it can make a profit, the greater additional value it can be to you the better. There seems no question that when our system is once established, the fact of the self-inspection will raise the risk in the estimation of every insurance man. The day will come when the elevator will stand higher as a fire risk at a lower rate. Any competition will not affect this company, as all grain dealers will recognize where the benefits originated.

COPY OF POSTAL CARD REPORT.

Policy No. 190..

Are the water barrels at least two-thirds full and a good pail at each barrel?.....

(A) Is elevator in a cleanly condition?

(B) When was it last cleaned?

(A) (B)

Are there more than three wagonloads of cobs accumulated on outside within 50 feet?.....

Have there been hot boxes, repeated choke-ups, breakdown of machinery, spark or other trouble, or fires started since last report, and if so, has the trouble been corrected?.....

Are the shaft-bearings examined and windows closed each night before leaving?.....

Have the grass, weeds and litter been cleared away for 50 feet around all buildings to prevent ground fires from communicating?.....

(To be answered from months of May to October inclusive.)

Remarks or explanations.....

From personal examination and knowledge, I hereby certify that the above answers are correct and apply since the last report.

Owner or Foreman.

A CORRECTION.

Editor American Elevator and Grain Trade:—

We wish to correct a statement that you have made that is not correct. You say that James Shuman has opened up here in the grain business. This is not correct. He did start in to do a scoop-shovel business, but did not stay long.

We are the only regular dealers here and have been for several years and have no competition here. Ours is the only elevator.

We also conduct a commission business at Nashville, Tenn., which is under the management of our brother, O. M. Best, who used to be regularly engaged in the grain trade in this state.

Yours truly,

Palmer, Ill.

BEST BROS.

NOTICE TO HAY AND GRAIN SHIPPERS.

Editor American Elevator and Grain Trade:—
We have sent the following circular letter to all members of the National Hay Association:

Please note the following supplement to Official Classification No. 26, effective January 2, 1905:

"The forms of uniform bill of lading and rules pertaining thereto, established by Official Classification No. 26, January 2, 1905, are hereby temporarily suspended, and will not be enforced until April 1, 1905. In the meantime the form of uniform bill of lading and rules pertaining thereto, as established by Official Classification No. 25, will continue in effect.

"The uniform bill of lading forms provided for by Official Classification No. 26, which have been printed, or that may hereafter be printed, by shippers, will, however, be accepted as is now done by all carriers from all shippers who may desire to use them."

Please be governed accordingly. Do not sign a bill of lading. Insist upon striking out the words "Not Negotiable" on order bills of lading.

Report to the general counsel, John B. Daish, Washington, D. C., if your freight agent insists upon violation of the supplement above recited.

Very truly yours,

Winchester, Ind.

P. E. GOODRICH, Sec'y.

BENEFITS OF ASSOCIATION WORK EXPRESSED IN COST.

Editor American Elevator and Grain Trade:—

Although we have had a short crop this year in most everything, and have not shipped our usual amount of grain, we have enjoyed a very profitable business. We attribute this more to the grain

dealers' association than to anything else. There has been a better and more friendly feeling among the dealers in this section and less petty jealousy and consequently less fighting.

We have had a profit in almost everything we have handled. Not a large profit, but a reasonable, legitimate profit. As a result of this friendly feeling and better understanding among dealers, we have been able to better satisfy the farmers, by paying top prices for good stuff and grading the off-grade to what it is worth. We have had less of that old-time "howl" from our farmer friends, "That you paid Mr. Blank so much for his stuff, and it wasn't near as good as mine."

We would say to every dealer, if you are not in the association, get there, and then work for it and stay with it.

Yours,

Peru, Ind. CANAL ELEVATOR COMPANY.

Per W. B. Weeks.

ANNUAL BANQUET TO THE CHICAGO WEIGHING DEPARTMENT.

The third annual dinner given by Chief Weighmaster H. A. Foss, of the Chicago Board of Trade, to the Board of Trade weighing department, took place at 7 p. m., at the Victoria Hotel, Chicago, on December 17. There were present almost the full force of 100 members of the department, a score of vesselmen, and invited guests numbering about twenty-five, practically filling the large hotel dining room.

There was good cheer, good things to eat and many expressions of good-will toward the giver of the feast, Mr. Foss, who sat with his guests at his right and left, and with the tables at which were his employees extending in long lines before him. One of these expressions took the form of verse and was attributed to one of the weighmen, who paraphrased an old couplet as follows:

Some hae meat and canna eat,
And some wad eat that want it;
But I hae meat and I can eat,
And so Gus Foss be thankit.

After the good things on the menu card had received satisfactory attention Mr. Foss spoke a few words of welcome to his guests and gave a short talk to his men.

Then there were short speeches by the following: H. A. Foss, George F. Stone, George Harris, George A. Stibbens, Walter Felt, C. F. Mills, S. C. Scotten, James Bradley, George Beyer and Rev. Jenkin Lloyd Jones.

We give the remarks in full of C. F. Mills, as a representative speech from a member of the weighing department. Mr. Mills said:

A great many complimentary things have been said here to-night about the deputy weighmen and their efficient work. While I wish to say, in behalf of my brother tallymen, that we highly appreciate this generous praise, yet I feel that the real credit for the good work has been misplaced. That alone belongs to Mr. Foss and his assistants, Messrs. A. E. and F. L. Schuyler, and Mr. Geo. Le Beau.

It was Mr. Foss who reorganized this department, and with their help made it what it is to-day. I can safely say, it is the most successful department of its kind in this country. And why is it a success? Because we all work in harmony. Each man has his share to do, and he realizes that it is up to him alone to show whether his work is a credit to the department or not. A man's work is in just the way he does it, either good work or poor work. If he applies himself to his work in a diligent manner, he is sure to receive the deserving credit; if, however, he is negligent and dilatory in the performance of his duty, he is sure to be called in for an interview, and I want to say to you, gentlemen, that that interview is mighty "short and sweet." Rigid discipline is enforced; there are no favorites in our department. As a matter of fact, I think we are all favorites; if we were not, I hardly think we would be enjoying ourselves like this, here to-night.

Every two or three months we have, in the smoking room of the Board of Trade, what Mr. Foss calls a sort of a "family gathering." We talk over the different branches of our work, and discuss any question that might come up at any time, and in that way we are prepared to cope with any emergency that may arise. And that is why the weighing department of this city is, and will continue to be, a success.

I shall only add—and I am sure that I voice the

sentiment of my brother tallymen when I say it—that our motto shall be in the future, as it has been in the past, "No matter what the contention may be, we shall go down the middle of the road regardless of what anybody says."

The following were guests of the evening: George F. Stone, Rev. Jenkin Lloyd Jones, George Stibbens, Robert McDougal, E. R. Bacon, Arthur Helm, John Webb, Eaton G. Osman, Al. V. Booth, George Harris, George S. Bridge, Jas. Crighton, Frank Bell, John E. Bacon, James Bradley, George Beyer, M. Johnson, F. L. Fake, Wm. Rowan, C. S. Clark, W. J. Birge, Jas. Wayman, G. H. Miller, S. C. Scotten, Arthur Sullivan.

POPE-ECKHARDT-ISMS.

There is one feature of the daily letter of the Pope & Eckhardt Co., Chicago, that one is sure every recipient reads with avidity—the snappy, witty and informing opening paragraph. Always to the point of the day's business history, it has frequently a laugh or is a kernel of wisdom which deserves perpetuation and much cogitation by the man disposed to think of things greater and more abiding than merely the day's profit or loss; videlicet:

"The Washington lobbyists give notice that no railway legislation will be permitted in Congress at the present session. Bills and resolutions galore will be introduced, committees will take testimony, etc., but no legislation will result therefrom. The public will be cajoled; the public pays the expense, and will continue to 'pay the freight.' Meanwhile there may be sneaked in the ship subsidy bill and an attempt made to legalize railway pooling. These are the schemes that make Debs and his tribe possible in America."—December 16.

"The fight in Congress over the changes in the interstate commerce law promises to wax warm after the holiday recess. As the opposition has already had, and will continue to have, its ablest men on the spot, it seems fitting that every shipper, great or small, should immediately and earnestly urge their congressmen to adopt the recommendations of the President's late message on this important subject. The voice of the people 'tells,' if only fully expressed."—December 22.

"Some bibulous biped claims, 'They must have had beer in the Ark, because the Kangaroos went in with Hops and the Bears were always Bruin.' However that may be, it is dollars to doughnuts that Noah's bunch of bears were never more busy than were their Chicago namesakes in wheat on 'Change to-day.'"—December 27.

"Iowa the Great, that has made many claims to leadership in the past, now shows that her agricultural and mining products for 1904 have an aggregate value of \$960,000,000, or a per capita value of \$400 for the 2,400,000 people of the state. When Iowa sends her present governor to the United States Senate (or the presidency), her 'glory and honor' will be complete."—December 29.

"The I. C. R. Co. has just issued a remarkable statement, showing net earnings from July 1 to November 30—five months—\$7,157,152 vs. \$5,234,411 for a like period of last year, an increase of \$1,922,741, or 33 per cent. For similar period the C. & M. & St. Paul Ry. Co. shows net increase of \$268,441, while the Penna. R. R. Co. lines directly operated show for eleven months a decrease of \$1,894,700. 'Looks like' Illinois is a pretty rich old state and 'The Central' a good property. There is no empire whose history, for productiveness of men and material, quite equals that of Illinois, Illinois!"—January 4.

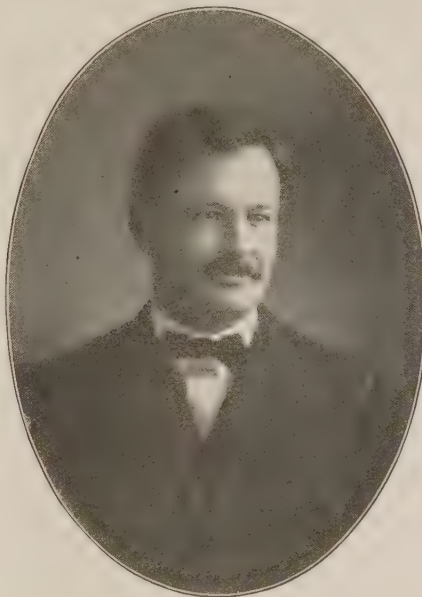
"Again we are reminded that the amendments to the interstate commerce law, better known as the Cooper-Quarles bills, now pending before Congress, will require the united and unqualified support of the whole trade in the West. All efforts to secure a pooling measure in any form should be vigorously opposed."—January 5.

Chicago insurance men are interested in the report that agents at Moberly, Mo., are writing grain in the elevator of the Missouri Grain Company and

inserting an agreement to cancel four-fifths of the insurance if desired by the assured after the policy has been in force thirty days.

A. A. ROBINSON.

Whether we study it at long or close range, the career of a growing man is always interesting and instructive—perhaps more interesting than instructive, since those peculiar personal qualities which differentiate the growing and successful man from one who with equal training, experience and opportunity does not seem to get on in the world are often so elusive as to avoid formulation in concrete terms. There is no effort in this brief sketch to compare A. A. Robinson, president of the Robinson Elevator Company of Duluth, with any other person, but it is manifest he is different from the generality of men, else at thirty-nine



A. A. ROBINSON, DULUTH.

years of age he would not be at the head of an already great business.

And yet Mr. Robinson started in the grain business as recently as 1891 as an employe of the Porter Milling Co. of Clark, S. D. But he took root and began to grow at once. In 1893 he went to Cavalier, N. D., with the National Elevator Co., for whom he worked until July, 1899, when, with the Hoff Bros. as partners, he built an elevator at Cavalier, the partners operating as Robinson & Hoff Bros., Mr. Robinson being manager of the business.

In 1902 Mr. Robinson went to Duluth to operate the Zenith Elevator, still retaining his interests at Cavalier. In 1903 he united with Duluth and Minneapolis parties to organize and incorporate the Robinson Elevator Company, with \$50,000 capital. At the same time he bought out his partners at Cavalier and later sold the house to the Imperial Elevator Co., and became by election manager and president of the Robinson Elevator Company.

The Robinson Company has had a continuous and healthy growth. In April, 1903, the Anton Erne line of seventeen houses was purchased and the elevators remodeled and put into first-class physical condition. These houses are now in their second season for this company, both very successful; in fact, in neither has the company been able to do all the business offered, owing to inability to get cars promptly.

As a side line for Mr. Robinson, in 1902, with James Elliott, he bought the Duncan Elevator at Rolla, N. D., which is operated by Elliott & Robinson, Mr. Robinson being manager. This house was burned in April, 1904, but was at once rebuilt, with improvements, including the addition of a feed mill.

Mr. Robinson's headquarters are at Minot, N. D.

DESTINATION OF MANITOBA WHEAT.

Up to December 12, when navigation closed, wheat shipments from Manitoba reached 15,755,456 bushels, against 17,046,939.50 bushels in 1903. The destination and carrier, 1904, was as follows, for crop of 1904:

Destination Canadian Vessels.	Other Vessels.
Owen Sound	1,514,786.30
Midland	2,580,116.40
Depot Harbor	2,229,052.10
Collingwood	556,091.50
Sarnia	677,794.00
Meaford	672,007.10
Goderich	1,844,747.50
Pt. Colborne	—
Kingston	1,334,162.00
Montreal	780,190.50
Soo for orders	—
Port Huron	—
Buffalo	1,625,646.40
Chicago	292,524.30
Detroit	—
Ogdensburg	—
	13,814,595.40
	1,940,860.20
Total wheat—	15,755,456.00.

No terminals now have more perfect facilities for handling grain than those at the Canadian head of the lakes. As at all other great grain terminals, and like everything else in connection with the grain trade on this continent, including the growing of the wheat, the present Canadian system of grain handling is one of gradual growth, and presents, in comparison with the methods of twenty-five years ago, the same advance that there has been in transportation. In 1883 the first little wooden elevator was built by the Canadian Pacific in Port Arthur, a small frame structure, capable of holding little more than 500,000 bushels. A year later a storage house was erected in Fort William, a larger building, but on the same principle and of the same material as that at Port Arthur. The crop of 1884 gave the company some idea of the possibilities of the prairie province under good conditions, and it quickly added two more wooden houses, having a combined capacity of 4,300,000 bushels. The application of machinery to the handling of wheat has rendered it possible today to unload at a single house almost 250,000 bushels in a day, and when the Canadian Pacific has completed the rapid handling elevator now under construction, it will be able to unload nearly 1,000,000 bushels in a day at Fort William alone, while the Canadian Northern, at Port Arthur, can take care of 500 cars in twenty-four hours. At December 5 the storage capacity at the two ports was as follows:

	Bushels.
Fort William—	
C. P. R. elevator A	1,250,000
C. P. R. elevator B	500,000
C. P. R. elevator C	1,300,000
C. P. R. elevator D	3,000,000
Empire elevator	1,500,000
Ogilvie elevator	500,000
Port Arthur—	
C. N. R. twin elevator	7,000,000
King elevator	800,000
Total	15,850,000

WISCONSIN STATE INSPECTION.

Superior will go to the Wisconsin legislature again this winter with a bill to establish a state system of grain inspection. Superior will tell the legislature that the Minnesota grading is so loose that it is necessary to raise the standard of the grades to protect the reputation of the grain shipped from head of the lakes. If this means anything, it means that the dockage is to be higher than Minnesota exacts in order to get a higher grade of wheat into the elevators, and mixing will be prohibited in order to prevent lowering of the standard of out-inspection. Just how this plan of campaign will turn wheat from the Duluth elevators into those of Superior, which is the ostensible object of the bill, it will take a "Philadelphia lawyer" to elucidate.

Now shippers and farmers want the inspection to

be easy and not strict, and it may be that is what the North Dakota farmers want when they promise "more aid" this year at the Madison lobby than they gave Superior two years ago, and the Superior newspaper men say the movement will have the moral support of the receivers at Buffalo, who will, of course, support any movement that will have a tendency to stiffen the out-inspection of which they are buyers and not sellers.

Outside of Superior there seems to be no demand for a state inspection law. W. M. Bell of Milwaukee, as well informed grain man as there is in that state, says: "We have had very little trouble in Milwaukee with the Minnesota system and complaints are seldom heard. A change in the inspection seems to be uncalled for. Superior would probably be the only beneficiary of the change."

MORE TROUBLE WITH RATES.

The announcement made at Cleveland on January 6, that the railway traffic men had agreed to a new method of constructing rates, by making Chicago, and not the Mississippi River, the basing point, was repeated at Chicago, on January 12, at a meeting held at the Board of Trade, to protest against the continued discrimination in rates against Chicago. This meeting was composed of representatives of the Illinois Manufacturers' Association, Chicago Shippers' Association and the Board of Trade. It then appeared that this change of basing point, which a Cleveland writer says "marks one of the most revolutionary changes in the matter of rate making that has been seen in this country in more than a quarter of a century," will be made by the Chicago lines within the next two weeks. By this method Chicago will be made the basing point for all grain rates, both domestic and export. A flat figure (probably 11 cents) will be made from Missouri River points to Chicago, and whether the grain is going through Chicago for export or into the local elevators, the rate will be the same.

In the past the Mississippi River has been the basing point for through traffic in grain, and the result has been much juggling, which, as a railroad official said, the big shippers got the benefit of, while the small shippers and the public generally paid the full carrying charges announced in the published tariffs. The difference has been around 1 cent for 100 pounds, and this went into the pockets of the large concerns as an added profit on the traffic.

The new plan was explained to the Central Freight Association, and met with general approval. It will be presented to the Western roads, and its speedy adoption is believed to be certain.

"One great good for railroad lines to come out of the change," said a railroad official, "is that when the Chicago grain shippers complain that the grain trade is being diverted from Chicago it can be seen exactly where the fault lies. That, however, is not so important as that the change will stop abuses in the trade, by which rates constantly are manipulated for the benefit of the few. It would appear that there will be no way, when the new plan is adopted, to manipulate rates for the benefit of anyone without a straight violation of the law."

The following explanation was made by railroad officials regarding the diverting of grain from Omaha to New Orleans.

On December 29 the Missouri Pacific contracted to take 1,000,000 bushels of grain from Omaha to New Orleans at a little less than 15 cents per 100 pounds. After the grain had been secured, a tariff was mailed to the Interstate Commerce Commission at Washington, announcing the reduced rate. This was what is known in railroadings as the "midnight tariff." The regular rate from Omaha to New Orleans, which was adopted on June 10, and which had ruled up to that time, was 18 cents. No explanation was made of the reduction, the Missouri Pacific, it is asserted, cutting its own rate to secure the business which otherwise might have come to Chicago.

The discrimination in grain against Chicago and

the East had come to be simply unbearable to the trade, as no grain has lately been coming this way, even from distances scarcely over 100 miles from Chicago, and, of course, none was going East out of Chicago.

"Unless something radical is done by the Eastern and Western roads in the matter of rates, Chicago as an exporting grain market will be wiped off the map," said E. L. Glaser of Rosenbaum Bros. "It is impossible now to buy corn in western Iowa, Dakota or Illinois within 100 miles of Chicago, ship it here, and export it by way of Atlantic ports except at an absolute loss. Iowa dealers who have shipped to Chicago for years cannot send any corn this way because Omaha bids are 2 to 4 cents a bushel more than any offers that we can make to ship here.

"The fact of the matter is, it surprises me that we are receiving any corn at all, and were it not that we now are getting that which was contracted for some time ago Chicago hardly would be receiving enough corn to supply the local requirements, whereas we had anticipated an enormous movement to this market during the winter months.

"The same difficulties attending the buying of corn will apply to the handling of wheat. Rates have been put in effect from Missouri River crossings to Ohio and Indiana mills by way of St. Louis at a much lower basis than the combination of the rate from Kansas City or Omaha to Chicago and from here to these same points. In every way Chicago is put at a disadvantage. There is no grain market in the country where there is as much money invested in modern elevators as there is in this city, but brains, ability and money combined cannot counteract the disadvantage of rates which constantly are working against us.

"The Eastern lines long have been improving their roadbeds, putting in double tracks, and increasing their equipment, and there is no reason with such facilities why they could not deliver grain to the Atlantic seaboard in competition with any of the gulf ports, but they are letting their golden opportunity get away from them."

W. N. Eckhardt, of the Pope & Eckhardt Company, said:

"We believed earlier in the season that it would be the experience in the grain trade this year that a large volume of corn would be diverted to gulf ports, first because plenty probably would be available and the condition and quality be good, and, secondly, because the Iowa territory, which during several years made such extraordinary demands for the Nebraska corn, also had grown a bountiful crop of excellent quality. The conditions in the territory tributary to Chicago during the last few weeks have been a revelation to the trade, because large purchases have been made for shipment to gulf ports in sections that could always in the past work by way of Chicago to much the best advantage, but a large volume of corn is now diverted south by a combination of favorable rates unheard of until recently."

NEW ORLEANS IN 1905.

Interviewed by the New York Commercial on his return from a recent trip to New Orleans, President Stuyvesant Fish of the Illinois Central road, among other things, said:

"I look upon New Orleans as one of the great grain-exporting ports of the country in the future, and believe that the increase in this class of business during the coming year will be phenomenal. With the unexcelled shipping facilities which that city now has and the additions which are now being made and will be made during the next two years, it will be difficult for any of the other ports to compete with it for this grain business.

"New Orleans is nearer to the great grain-producing sections, and the railroad facilities are such that grain can be taken there for export much cheaper and more quickly than to the Atlantic seaboard. It is in order to handle this increase in the grain business, which we anticipate, that we are making improvements in the elevators

there, and expect to do more as the demands of business increase."

GOOD SEED SPECIALS.

The immense popularity of the seed corn lecture special run through Iowa last spring, with Prof. P. G. Holden as lecturer, and its apparent influence on the corn crop of that state naturally suggested its duplication, not only in Iowa but in other corn states; and not only in the corn states, but in the Northwest, where the question of the merits of rusted wheat as seed is by no means settled to the satisfaction of either scientists or farmers, and where the sowing of good seed is felt to be of the highest importance in the future, both immediate and remote.

This year the railroads of Iowa have needed no urging to supply the necessary transportation. Indeed, the roads themselves have taken the initiative; and, as in the case of the Burlington system, which opened the lecture season in Nebraska on December 14, provided a train consisting of two private cars, one of which was occupied by Prof. T. L. Lyon of the University of Nebraska, Professor Holden of the University of Iowa, Professor Hopkins of the University of Illinois, a representative of the University of Missouri, and by various officials of the Burlington route, while the other was equipped as a lecture room, with charts and maps about the walls, with other corn data, and with apparatus for making practical tests for determining the germinating power of seeds.

The first trip was for seven days, starting from Lincoln and extending through Eastern Nebraska. Wherever the special was scheduled to stop it was halted conveniently near the depot, and the lecture began as soon as the crowd was aboard, all communities being advised in advance of the arriving time of the train. After the lecture was delivered those in the car were supplied with printed copies of it, and with other literature, provided principally by the State University.

In January the train is moving through Illinois; in February and March it will be in Iowa and Missouri, after which it will go to Western Nebraska and perhaps to Wyoming. In each state traversed the state universities will furnish lectures and literature for distribution. In addition to the lectures and the circulation of literature on seed corn and soil inoculation, there will be, for the first time, a general and generous distribution of Professor Moore's nitrogen bacilli, together with packages of Russian wheat from the semi-arid districts of Russia and Algeria and of Kersten oats, which latter, experiments have proved, are adapted quite admirably to such soil and latitude as those of Western Nebraska.

In Iowa lecture trains will be run in February and March over the Burlington, Rock Island, Milwaukee and North-Western systems. The advertising will be directed by Secretary Wells of Iowa and be attended to locally by the grain dealers.

In the wheat country of the Northwest the same sort of lecture trains will be moved by both the C. & N. W. and the Soo Line railways, lectures to be furnished by the universities and experimental stations of Minnesota and the Dakotas.

The Soo Line train will be in charge of the North Dakota Agricultural College, and samples of all varieties of grains at present grown in the country will be carried; but a specialty will be made of a special exhibit of seed grains, which will furnish an opportunity for an inspection of all of the new varieties now attracting attention, such as macaroni wheat, Russian oats, etc., as well as seeds of such hardy vegetables as recent experiments have demonstrated can be grown successfully in the latitude of the Dakotas.

In addition the members of the Brookings Experiment Station are giving many lectures on seeds in various courthouses throughout the state of North Dakota.

In this connection the following suggestion by the secretary of the Grain Dealers' National Association deserves wide circulation among farmers:

"We believe that strenuous efforts should be made by the Grain Dealers' Association and by the national organization to prevail upon the leading houses of the country to handle pedigree seeds and seeds adapted to the localities in which they will be used. It is a well-known fact that yearly hundreds of thousands of bushels of attractive seed are distributed throughout the country, at high prices, that are wholly unfitted for the requirements of the localities to which they are sent. The seed dealers of the country are not, in our opinion, responsible for this condition, for until comparatively recent years the breeding of seed grains was not seriously considered and farmers were attracted wholly by the appearance of seeds offered."

NEW ENGLAND GRAIN DEALERS.

The New England Grain Dealers' Association completed its first year of existence on December 15, and celebrated the fact by a banquet at the Exchange Club in connection with the annual meeting. There were about 120 members present.

In the absence of President Hawley of Fitchburg, the dinner was presided over by D. W. Ranlet of Boston, and short addresses were made referring to the work of the Association by Frank Cressy of Concord, N. H., and Mr. Ranlet.

Henry M. Whitney, president, and E. G. Preston, secretary of the Chamber of Commerce, and G. F. Reed also made addresses. Mr. Whitney spoke mainly on the reciprocity questions, saying that the great opportunity of Boston for building up an enormous commercial city and giving to the Association international importance in the handling of its grain was lost because the people and merchants of Boston did not cry out against the policy that has turned Canada away from the United States at the opportune time.

At the annual meeting held after the dinner, the following officers were elected: President, H. C. Yeaton of Portsmouth, N. H.; vice-president, W. F. Burditt of Rutland, Vt.; directors, Eben Ham, Lewiston, Me.; Frank Cressy, Concord, N. H.; B. W. Brown, Concord; Henry Burbeck, North Abington, Mass.; G. L. Hurd, Providence, R. I., and O. E. Lapham, New Haven, Conn.

"SWEEPING" AT SUPERIOR.

The following cutting from the Telegram, newspaper of Superior, Wis., if strictly accurate, discloses a state of affairs at that market which is quite the worst phase of the "sweeping" problem that has come to our attention. We republish it in full, but without assuming any responsibility for the facts:

"Railroad detectives are just now making strenuous efforts to break up alleged gangs of wheat sweepers in the various parts of the city. They are found in the West End yards, the East End yards, at South Superior and on Connors Point, and the loss to the railroad companies through their depredations each year is claimed to be a great amount.

"The number of arrests that have been made on account of sweeping cars in the last few weeks has been exceedingly large, and in most cases the offenders have met with heavy fines. It is the intention of the detectives to go after the wheat sweepers as hard as possible, and the other officers of the law seem disposed to aid in the work as much as they can.

"In some cases it is claimed there are organized gangs that make great amounts of money out of the sweeping business. People have been found that were acting as 'clearing houses' for the wheat sweepers and some of these have been found to have several hundred bushels of wheat on hand at various times.

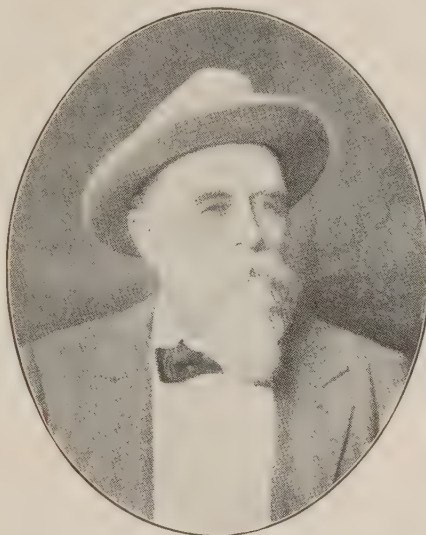
"Judge Haily recently decided that wheat swept might be replevined by the railroads and this has been done in some cases. Some of the roads have given notice to commission and feed men that hereafter wheat sweepings will be considered as stolen

property, and they will take the same steps to recover it as in the case of any other stolen property. There is talk of all the roads combining in such a notice, and then the commission men, it is claimed, will be compelled to refrain from buying any wheat from the sweepers unless they care to run the chances of getting into trouble."

DEATH OF JOHN REICHELDERFER.

John Reichelderfer, head of the firm of John Reichelderfer & Son, dealers in grain, hay and seeds at Cridersville, Ohio, died at his home on December 20, 1904, after a long and painful illness.

Mr. Reichelderfer was born March 31, 1841, on the old Reichelderfer homestead near Cridersville, Ohio. He was the eldest son of William and Sarah Reichelderfer, who migrated from Pickaway County, Ohio, to the present homestead in Auglaize County, Ohio, in the year 1837. The county was then practically a wilderness, and in his boyhood days Mr. Reichelderfer was able to attend school but three months in the year, and as he grew older he was called upon to help his father clear away the forest and improve the farm.



THE LATE JOHN REICHELDERFER.

In the year 1862, at the age of twenty-one years, he married Miss Susan Crider, after whose parents the village of Cridersville was named, and to their union were born two children, both of whom survive him, but the wife and mother departed this life on July 5, 1884. In April, 1887, he married Sophia Danner, who still survives him.

On October 2, 1862, Mr. Reichelderfer enlisted in the Union army as a private in Company G, Eighty-first Ohio Infantry, and afterward was promoted to sergeant. He was with General Sherman's army in the famous "march to the sea," and was mustered out and received his honorable discharge on July 20, 1865.

In politics Mr. Reichelderfer was a staunch Democrat and as such was elected to and held many political positions, among them the office of county commissioner for two terms of three years each.

In 1891 he formed a partnership with his son, E. F. Reichelderfer, and entered into the grain and hay trade, which their push and energy have built up to an extensive business. They have been well-known shippers to all Eastern markets and the business will be continued by the surviving partner. The firm has been member of the Miami Valley Grain Dealers' Association, affiliated with the Ohio State Association.

At the time of Mr. Reichelderfer's death he was president of the Home Bank, an institution he organized two years ago. He was a lifelong member of the Lutheran Church and an active church worker to the last, a cheerful giver, a counsellor to all and to those who met him familiarly a friend always.

MINNESOTA STATE INSPECTION.

F. W. Eva, chief inspector of Minnesota, on December 13 filed the nineteenth annual report of the state grain inspection department for the 1903 crop, which is compared with the department's work on the 1902 crop, by number of cars inspected, as follows:

	1903.	1902.
Wheat	127,435	138,835
Corn	4,235	3,186
Oats	23,121	16,647
Rye	3,532	3,028
Barley	19,527	17,122
Flax	30,638	31,398

Total cars 208,488 213,216

There was inspected "out of store" for the same period: Spring and winter wheat, 41,103 cars and 24,394,287 bushels into vessels; coarse grain, including corn, oats, rye and barley, 19,039 cars and 10,390,444 bushels into vessels; flaxseed, 5,820 cars and 14,745,112 bushels into vessels, making a total "out inspection" of 65,962 carloads and 49,529,845 bushels of all kinds of grain.

These figures cover the seven inspection points of the state, to wit: Minneapolis, Duluth, St. Paul, St. Cloud, New Prague, Sleepy Eye and La Crosse (since discontinued).

The revenue account for the year is as follows:

Inspection department	\$143,613.96
Weighing department	107,025.97
Country elevator licenses	1,629.00
Board of Appeals—grain samples sold	194.00
From interest on deposits with state treasurer	2,156.74

Total receipts, all sources \$254,619.67

The disbursements of the department for the year were \$240,574.71, making a net gain of \$14,044.96. The surplus left over from the preceding year was \$80,268.36, leaving a balance on hand August 31, 1904, of \$94,313.32. Of this amount, \$94,294.57 is deposited with the state treasurer, and \$18.75 is for uncollected fees due from the Minneapolis inspection department.

Reinspection was had on 29,122 cars during the year, of which on 14,977 the original grade and dockage were confirmed. Grades were raised in 9,563 cases and lowered in 1,966 cases, and in 2,616 cases the dockage was changed. Appeal was taken to the Board of Grain Appeals in 10,000 cases, in 7,228 of which the decisions of the chief deputies were confirmed.

Chief Inspector Eva devotes a portion of his report to the new methods of inspecting coarse grains in vogue in Minneapolis, and states that during the present year grain cars at each of the ten railway yards have been sampled, and the samples carted to inspection headquarters, where experts have personally gone through them all, providing uniform inspection for all grain arriving. One man handles the flax, another oats, and another rye, corn and barley. Formerly the inspections were made by many different men, at the cars in the yards, and a considerable variation of grade was noticeable. Reinspection and appeals have dropped off since the new method was put in effect, and it has been proven, the inspector believes, that the system is vastly more efficient than track inspection.

The report states that the department hopes eventually to handle wheat inspection under the same general plan, since there is evidence that the change will improve the efficiency of the department. Concerning the 1903 crop, Mr. Eva says:

"The 1903 crop of grain was conceded by every one conversant with the grain business to have been a very difficult one, if not the most difficult to inspect and handle to the general satisfaction of all parties concerned, since the inception of the state grain department. Our first receipts of grain gave promise of a comparatively easy crop to inspect, being fully up to the usual average, but such receipts were of short duration, as the heavy and continuous rains which followed for weeks completely destroyed the grain in some sections, while in others it stood unprotected in the shocks. All thrashing was stopped, except in cases where the farmers, from necessity, were compelled to market their grain. Thus, between the storms, large quantities of grain were thrashed and mar-

keted in a wet condition. It became a serious question whether or not any wheat would be sufficiently dry to be admitted in the grades. On some railway lines the country elevators received large quantities of grain in this condition, and, owing to the shortage of cars, were unable to ship quickly to the terminal markets, where there are better facilities for handling. This condition of affairs caused the grain to get hot and burn in the elevator bins, thus adding to the already complex situation.

"With such conditions the inspection department work has not been that of a sinecure, but it is gratifying to note the shippers, as a whole, seemed to realize and appreciate our efforts to deal as generously as we could and be consistent with our rules of inspection."

THE NATIONAL BOARD OF TRADE.

The annual meeting of the National Board of Trade will be held at Washington on January 17 and following days—probably closing on the 19th. The official program of propositions which have been submitted by constituent bodies covers subjects indicated by the following: American Merchant Marine; Interstate Commerce Law; Railroad Pooling; Uniform Bill of Lading; Time of Shipment Definitions; Parcels Post; Postal Rates—Postal Questions; Post Check; Navigation Improvement for the Ohio and Mississippi Rivers; Port Judith Harbor Appropriations; Delaware River Improvement; Coastwise Waterways; Free Ship Canal from the Chesapeake Bay to the Delaware River; Improvement of Harbors and Waterways; International Arbitration Treaties; Anglo-American Arbitration Treaty; Proposed Arbitration between Russia and Japan; Reciprocity with Canada; Reciprocal Trade Relations; Consular Service Reform; Higher Commercial Training; Commercial Education; Free Alcohol for Industrial Uses; Regulation for Wood Alcohol; Lowering Bill—Drawback Laws; Lower Tax for Alcohol; Forestry and Irrigation; Forestry Bureau; Governmental Inspection of Grain; McCumber Bill—Uniform Standard for Grain Classification and Grading, and National Inspection of Grain; National Currency Laws; Uniform Standard of Weights and Measurements; Board of General Appraisers; Naturalization Laws; National Trade Mark Law; Tariff on Goods from the Philippines; Presidential Term of Office; Prohibiting Use of the American Flag for Advertising or Trade Purposes; National Navigating Naval Reserves; National Experimental Cold Storage Plant; National Improvement of Roadways; Government Control of Interstate Insurance.

WHEAT IMPROVEMENT IN CALIFORNIA.

Sufficient money has been raised by private subscription to begin the necessary experiments to improve the quality and quantity of wheat in California and continue them until an appropriation can be secured from the state treasury.

Manager Arthur R. Briggs of the State Board of Trade says that there is \$3,585 in sight. The Sacramento Valley Development Association has promised \$500, and will raise \$500 more. The San Joaquin Valley has raised \$1,000. The flour millers have done their share of the work. There is in bank \$1,585 subject to the orders of the committee. A bill will be drawn for submission to the California Legislature appropriating \$6,000 to carry on the work for two years.

The services of the agricultural department of the University of California and the help of an agricultural expert representing the United States Department of Agriculture will be given free of cost for the benefit of the state.

The treasury department has finally agreed to allow a drawback of the duty on wheat on all flour made from Canadian and domestic wheat combined. The mills may, therefore, grind Canadian wheat

after paying the duty thereon, but in order to get the drawback of duty their records must show the respective quantities of foreign and domestic wheat used in the flour exported.

R. A. COBLE.

Many, perhaps most, of the elevators in Eastern Pennsylvania are distributors of grain rather than collectors and shippers of a local surplus. Usually the population is so dense that the agricultural industries run rather to the "farm factory," where grain is fed to produce milk and meat, rather than to the production of grain to sell as such. The Bellaire Grain Elevator and Grist Mill, at Bellaire, Lancaster County, is, however, so happily situated in the garden of the Conewago Valley, along the Cornwall & Lebanon Railroad, that it is both an assembler and a local distributor of grain, as well as a dealer in flour, feed, seeds, baled hay and straw, coal and lumber and many other bulky commodities consumed by the farmers.

The building shown in our engraving was erected about 1880 by C. H. Coble, a progressive farmer, who came to town and established a very successful business in both wholesale and retail departments. The grain house has storage capacity for about 10,000 bushels of grain and has modern handling and other machinery, with a complete grist mill department in the same building, the



R. A. COBLE'S ELEVATOR AND MILL.

combined grain and feed lines making themselves a very comfortable business. Mr. Coble also handled coal and lumber; of the former especially he sold large quantities.

Mr. Coble carried on the business with satisfaction to himself and his patrons also until he died in 1896, after which his two sons, Allen A. and C. L., conducted the business for the estate for a few years. Then C. L. Coble purchased the buildings from the estate and continued the business quite successfully until his death in 1901. The real property still belongs to C. L. Coble's estate, but the business is carried on by R. A. Coble, his youngest brother, who is well pleased with what it is doing.

Mr. Coble runs a 20-horsepower gasoline engine, and during the winter, or feeding months, he custom grinds some 200 bushels daily for the local trade. Indeed, what with his many different lines, there are no dull seasons here.

WEIGHT OF NORTHWESTERN WHEAT.

Statistician Hyde's estimate of the wheat yield of the Northwest as 151,000,000 bushels was considered a bear document, and caused some dumping everywhere and a slump in prices, until Jones "buted in" again with his consistent pessimism and pointed out that conceding the department's figures to be true, yet, as the department puts the weight at only 52 pounds in Minnesota, 51 pounds in North Dakota and 50 pounds in South Dakota, an average loss of 9 pounds, the actual yield, in 60-pound bushels, would be only 129,000,000, or ten million bushels under Jones' own sensational August estimate.

But Thornton, of the Duluth Commercial Record, says: "We have reason to believe that these estimates are wrong. In fact, we know them to be

wrong, so far as can be determined by the wheat that came to Duluth, and that was probably a fair average of the crop. If it be stated and admitted that Duluth received a better quality of wheat than Minneapolis, then the average will be made good by the better quality of the wheat that is still to come.

"The Record has kept a careful record this fall of every wheat cargo out of Duluth and we find that the average test weight of all these cargoes was 55.3 pounds. In order, however, to produce this average test it was necessary to shrink the wheat received by blowing out the light-weight stuff and putting it into screenings. Inquiry shows that the loss from this source was from 1/2 pound to 2 pounds to the bushel, and the average test weight of all wheat received was about 53.8 pounds to the bushel. It can be set down as a certainty that this figure of 53.8 pounds represents the minimum test weight of the Northwestern wheat crop of 1904, rather than the maximum."

CANADIAN GRAIN GROWERS' DEMANDS.

The fourth annual convention of the Territorial Grain Growers' Association was held at Regina, N. W. T., on December 12-14, and made the usual complaints that the farmers are not getting "the full value" of the grain. First President W. R. Motherwell of Abernethy in his annual address said:

For the past two or three years there has been a constantly growing feeling among Western producers that our wheat grades are too high and require at least readjustment; and this feeling has developed now almost into a settled conviction. Previous to five years ago the laxity of our grading and the almost entire disregard for standards became so notorious that many of our best thinkers among both producers, dealers and exporters came to the conclusion that something radical had to be done to preserve the high character of our wheat as grown, or our reputation abroad would suffer irreparable loss and injury.

The Western Grain Standards Board, the Winnipeg Grain Exchange, and the Western M. P.'s and senators vied with each other in having such amendments made in the inspection account and in abolishing the difficulties complained of and gave us the present high standards fixed by Parliament, and to which we now find ourselves unable to attain, except on very occasional cases. There is surely a medium between these two extremes that will do, on the one hand, ample justice to our well-earned and world-wide reputation for growing the very best grade of hard milling wheat, and on the other hand, by a laudable ambition to rank high and excel, not exclude ourselves from the attainment of our own classification.

Among the resolutions adopted by the convention relating to the grain act now operative in the Canadian West, are the following:

Whereas, At the present time the producers, owing to the present system of marketing their grain, are not receiving the full value for their wheat, be it

Resolved, That in the opinion of this convention the establishment of a sample market in Winnipeg and the making of that place an order point by the railway companies would appear from such evidence now at their disposal to be conducive to the interests of the producers; and that the executive be requested to investigate the matter, and, if found desirable, to take such steps as will bring about the desired changes.

In view of the fact that at the meeting of the Western Grain Standards Board in 1904 it was impossible to secure proper samples of grain grown in the Northwest Territory, owing to the lateness of the harvest there, and that in consequence of this the standards were based on samples obtained almost entirely from Manitoba, and that this state of affairs is likely to continue to exist, the said board should be empowered to appoint a sub-committee of its own members, with power to deal with any new conditions that might arise on account of a dissimilarity between the samples from Manitoba and those that may have been subsequently collected from the Territories, and that any three members of the board shall have power to convene the said sub-committee.

That the right be secured to load from warehouses or vehicles by means of a portable elevator or other mechanical appliances that may be desired.

That this convention would request the early appointments of two or more deputy warehouse commissioners to exercise a closer supervision in

the working of elevators and general shipment of grain throughout the country.

Whereas, Considerable difficulties appear to exist in the way of the shipment of grain from certain of the mail railway sidings, be it

Resolved, That this Association request the railway companies to make such arrangements and provide such facilities as will enable shipments to be made from these sidings.

Resolved, That it is the unanimous opinion of this convention that the Grain Standards Board should be convened forthwith to deal with the question of Territorial wheat, a considerable portion of which, owing to the peculiar climatic conditions experienced this year, has marked characteristics which exclude it, to the prejudice of the producer, from the grade to which it otherwise properly belongs, by establishing such supplementary grades as they may deem to be necessary in the premises.

That this Association desires to reaffirm the belief that a fiscal policy based on the principle of mutual tariff preferences between the mother country and the colonies is of the first importance to the prosperity of Canada and the well-being of the British Empire.

Whereas, A great deal of dissatisfaction with the results of the grading of our wheat exists among our members; and

Whereas, It is desirable that a check should be applied to the working of the system in the meantime; and

Whereas, The knowledge of conditions surrounding the grading of our wheat must precede intelligent criticism looking towards possible improvements, it would appear that an agent of this Association stationed at Winnipeg would be capable of rendering great service to the individual members and to the Association, as a whole; therefore, be it

Resolved, That such an agent be appointed by and be under the control of the central executive. One of his duties shall be to watch the grading of cars for members, and members only, who shall notify him regarding shipment of their grain, sending samples of same; a fee of fifty cents to be charged for each car so cared for by the agent, which fee shall be accounted for by such agent to the Central Association.

MEMPHIS EXPANDING.

The Williams & FitzHugh Company, of Memphis and Vicksburg, has leased a grain elevator at Mobile, Ala., through which to do their business in the exportation of grain. The company has heretofore had space in the elevators of the Frisco and Illinois Central systems in New Orleans, through which they have conducted their export business, but these elevators have been leased to individual grain shippers of Chicago, thus necessitating new arrangements.

The Williams & FitzHugh Company now has a chain of elevators from Nebraska to the Gulf Coast. These are located at Omaha, St. Louis, Memphis, Vicksburg, Miss., and Mobile.

Other large grain firms at Memphis are completing plans for the extension of their elevator systems. The recent changes in the railroad facilities of that city through the new lines that have been opened between Memphis and the Gulf and throughout the Mississippi Valley have given a stimulus to the grain business through the Memphis gateway, and increased facilities have become a logical necessity.

Speaking of this phase of the situation, a prominent grain man at Memphis said to a New York Commercial reporter: "Memphis is sure to become a great center for the distribution of the grain movement from the West. Preparations are being made on such a scale that when they are completed Memphis will rival St. Louis in the handling of grain. It is a mistaken idea that the building of new roads from Memphis to the Gulf will take away a part of the grain business of Memphis. It will increase it. The distributing business will be done through Memphis and the export business will be done at New Orleans and other Gulf ports. Memphis will have to construct elevators for the storing of grain."

The Memphis grain dealers are now organizing a local association which is expected to affiliate with the National Association.

Duluth has three-quarters of her storage capacity filled with wheat, and can take not to exceed 5,000,000 bushels more.

PRACTICAL SUGGESTIONS ON CODIFYING THE LAW OF WAREHOUSE RECEIPTS.

BY FRANCIS B. JAMES.

[From a paper read by the author at the annual meeting of the American Warehousemen's Association, held at Washington, in December, 1904.]

Of 160 national commercial organizations in the United States, the American Bankers' Association and the American Warehousemen's Association have manifested the deepest interest and co-operation in improving the commercial law and making it uniform. It will be superfluous to discuss the wisdom of and necessity for codifying the law of warehouse receipts and making that law uniform throughout the United States, because the American Warehousemen's Association has already placed itself on record on these questions and appropriated \$1,500, and the conference of commissioners on uniform state laws has employed Harry Mohun, of the Washington bar, and Prof. Samuel Williston, of Harvard Law School, to do the work. It remains to make a few practical suggestions on framing and perfecting this code.

The proposed code governing warehouse receipts is a commercial code, and, therefore, ought to be based on the mercantile rather than the legal view, where a conflict exists. A brief sketch of the growth of mercantile law may aid in a solution of this question. England, from whom we derived our traditions, is and always has been a commercial nation. King Alfred, who reigned at the end of the ninth century, passed laws permitting foreign merchants to visit his kingdom for purposes of trade during the great fairs. The Norman kings made unfulfilled promises to their subjects that King Edward's code of Saxon laws should receive the royal sanction, and about the year 1100, Henry I granted a charter of liberties. On June 15, 1215, King John signed the Magna Charta, which guaranteed right to international trade as follows:

"All merchants shall have safety and security in coming to England and going out of England, and in staying and traveling through England, as well by land as by water, to buy and sell, without any unjust exactions, according to ancient and right customs."

To the consistent fulfillment of this declaration, England owes her commercial supremacy for 700 years. The foreign merchants added to these "ancient and right customs" commercial usages of the continent on many subjects. The merchants at each great fair instituted a "Court Pepoudrous," or "Dusty-foot Court," so called (because disputes were there settled as quickly as "the dust fell from the feet"), and there administered justice according to these customs. By the beginning of the seventeenth century the custom of merchants was admitted as evidence in the courts in cases of trade contracts, and by the middle of the eighteenth century business had so increased that the usage of merchants was recognized in courts as part of the common law.

The struggle was a long one. Foreign bills of exchange first received judicial sanction; domestic bills next fell under judicial sway; but promissory notes were slow to find a place in the law. Lord Chief Justice Holt, in the year 1703, ruled in the case of *Clerks vs. Martin* that a promissory note was not negotiable, and declared that the merchants were endeavoring to set the law of Lombard Street above the law of Westminster Hall. The merchants, however, successfully appealed to parliament, and Lombard Street did make law for Westminster Hall. This act was passed in the year 1704, and is known as the statute of 3 and 4 Anne, chapter nine; and has been re-enacted in most of the American states.

Mercantile usages as to checks, bonds, certificates of stock, scrip, warehouse receipts and bills of lading have found judicial recognition. Mercantile usages as to the relation of partners, principal and agent, bailor and bailee, and other commercial transactions, have also received judicial approval.

Many judges of many courts have at times refused to recognize mercantile usages in their

purity, and declined to give them full force. The Supreme Court of Massachusetts, on April 3, 1833, in the case of *Hallgarten vs. Oldham*, declared that a warehouse receipt issued by the owner of a private warehouse to a third person, by name and not to his order, and by him assigned, did not transfer title. Mr. Justice Oliver Wendell Holmes, in deciding that case, said: "The appeal to commercial usage cannot help the plaintiff's case. If there be any usage to treat such documents as this as symbols of property in the sense of the argument of the plaintiffs, it is simply a usage to disregard well-settled rules of law affecting the rights of third persons."

The merchants gave to the law their customs and usages. The courts have been slow at times to give these customs and usages the full force of law. Now, however, that our legislative bodies are to give back to the merchants codes of mercantile law, these codes should, so far as possible, embody those customs and usages, freed from legal jargon and unhampered by mere legal rules, except such as are based on the ethical principles underlying all American jurisprudence and principles of economics underlying sound and sane commerce.

In 1775, and repeatedly in 1793, in the celebrated cases of *Waugh vs. Carver*, the English courts held that the mere receipt of a percentage of profits made one a partner; and this remained the law of England until overthrown by the House of Lords in 1863. For a period of eighty-three years English lawyers evaded the effect of this decision by providing, not for a receipt of a percentage of the profits, but for a receipt of an amount equal to a percentage of the profits. This was mere legal jargon.

A mercantile code should be a clear expression of well-recognized commercial customs, whether they have or have not yet found their place in judicial decisions. The merchants gave to the law their customs, and the law should give their customs back to them clearly expressed and freed from mere technical expressions. Whenever there is a conflict between mercantile usages and legal expressions, legal expressions should give way to mercantile usages embodied as rules of law.

Sir Courtney Ilbert, in his work on "Legislative Methods," page 247, gives the following excellent advice: "The language of a bill should be precise, but not too technical. An act of parliament has to be interpreted, in cases of difficulty, by legal experts; but it must be passed by laymen, be administered by laymen, and operated on laymen. Therefore, it should be expressed in language intelligible to the lay folks. In some cases the compromise between popular and technical language may be effected by means of a definition. But definitions are dangerous and should be sparingly used."

A commercial code should consist in part of a statement of general principles governing usual cases which arise in practice. The great object of a code is certainty. One most bitter opponents of codifications concede that mercantile law should be codified for the sake of the certainty of the rule. Therefore, a code should not consist of a mere statement of general principles, leaving its application entirely to the discretion of a judge. The French codes, for this reason, are not models to be followed. Nor, on the other hand, should a code define too much. A code should consist of a statement of the general rules of law applicable to general business transactions and exceptions to the rules applicable to the usual exceptional cases. To sum up: The collocations of facts which arise in mercantile transactions should be provided for. The code should be based upon judicial decisions, judicially recognized customs and customs recognized by the mercantile community. Where judicial decisions conflict with well-recognized, economically and ethically sound customs, the mercantile customs should be embodied in the code in preference to the formal technical rules.

A code should be so framed as not to check the growth of new mercantile customs. While a code should contain rules and well-defined exceptions, it

should be framed so as to allow new mercantile usages to grow. As said by Sir Frederick Pollock in certain lectures delivered by him on the occasion of his visit to America in 1903: "It is important to observe that the law merchant was not incorporated into our systems, as some have contended, as a fixed body of rules incapable of addition. It is still, in fact, a living body of customs, and English decisions have quite lately recognized this fact."

A code must be framed so that there will be uniformity of decision, not only in interpreting its provisions but in laying down rules governing transactions not covered by it. The great object in preparing a code is to produce a uniform law throughout the United States by having each state adopt the same code.

It is universally recognized that there is no common law of the United States. It is true that a Federal court, obtaining jurisdiction by reason of diversity of citizenship, will use its independent judgment in determining what is the law of the state. This was elucidated by Mr. Justice Story, when he said, in 1843, in the case of *Swift vs. Tyson*: "The law respecting negotiable instruments may be truly declared, in the language of Cicero, adopted by Lord Mansfield in *Lake vs. Lyde*, * * * to be in a great measure, not the law of a single country only, but of the commercial world." But this very doctrine has resulted in increasing lack of uniformity. On such subjects as to which Congress has jurisdiction, such as interstate commerce, there may be a unity of law. As to general commercial subjects there cannot be unity of law, but there may and ought to be uniformity. The object of framing a code and having it adopted by each state may fail in part unless clauses can be framed which will bring about uniformity, not only in the interpretation and construction of the code itself, but in applying rules of law to cases not covered by the code and applying mercantile usages which may arise after its adoption.

The English bills of exchange act, passed August 18, 1882, provides (Section 97) that: "The rules of common law, including the law merchant, save in so far as they are inconsistent with the express provisions of this act, shall continue to apply to bills of exchange, promissory notes and checks."

The negotiable instruments code, prepared by the Conference of Commissioners on Uniform State Laws, and now adopted in twenty-five states and territories, provides (Section 7) that: "In any case not provided for in this act, the rules of the law merchant shall govern."

The English sales code, passed February 20, 1894, provides (Section 61) that: "The rules of common law, including the law merchant, save in so far as they are inconsistent with the express provisions of this act, and in particular the rules relating to the law of principal and agent and the effect of fraud, misrepresentation, duress or coercion, mistake, or other invalidating cause, shall continue to apply to contracts for the sale of goods."

In the draft of a sales code, prepared by Prof. Samuel Williston for the Conference of Commissioners, the same provision (numbered as Section 60) is found. This section received much discussion at the meeting of the Conference of Commissioners in September, 1904, and at St. Louis. Professor Williston was instructed to carefully reconsider it.

The secretary of the American Bar Association, who has in his hands the manuscript of the proceedings of the Conference of Commissioners on Uniform State Laws, held in September, 1904, at St. Louis, furnishes the information that Professor Williston has redrafted this clause (as Section 60) so as to read as follows:

"(1) In any case not provided for in this act, the rules of the common law, including the law merchant, and in particular the laws relating to the law of principal and agent and the effect of fraud, misrepresentation, duress, coercion, mistake, bank-

ruptcy or other invalidating cause, shall continue to apply to contracts for the sale of goods.

"(2) This act shall be so interpreted, if possible, to effectuate its general purposes to make uniform the law of those states which enact it. Its interpretation shall not be aided by a consideration of peculiar rules of law prevailing in this state."

In the English partnership act, passed August 14, 1890, it is provided (Section 46) that: "The rules of equity and of common law applicable to partnerships shall continue in force, except in so far as they are inconsistent with the express provisions of this act."

Prof. James Barr Ames, dean of the Harvard Law School, is now preparing an American code governing partnerships. As he is a member of the Conference of Commissioners on Uniform State Laws and attended its last session, his forthcoming code will probably contain valuable suggestions on this subject.

Mr. R. Flody Clarke of the New York bar, author of the "Science of Law and Law Making," one of the most vigorous opponents of general codification, but who concedes that commercial law should be codified, has made a suggestion that each code should contain the following clauses: "The foregoing rule shall apply except in cases where the special facts of the case presented shall in the opinion of the court produce a result so inequitable as to require the establishment of an exception, as in ascertaining the application of the rule or the exception, the court shall be at liberty to follow out the reason of the rule and the reason for the exception on the lines of cases heretofore decided in common law."

The language contained in the English bills of exchange act, sales code, and partnership act, would not be wise in an American code because the English codes are applicable to a country in which there is but one court of last resort. In America, the Supreme Court of each state finally determines the law of that state, and, in addition, the Federal courts determine for themselves the law in each state. The rule laid down by the American negotiable instrument code that, "In any case not provided for in this act, the rule of the law merchant shall govern," is best fitted for an American commercial code. However, it probably does not go far enough. If the courts of a state are called on to determine what are the rules of the law merchant, possibly a conflict will be found. It might, therefore, be wise to add an additional rule, that, in determining what are the rules of the law merchant, the law laid down by the Supreme Court of the United States shall govern; that if there be no decision of the Supreme Court, the rules laid down by the United States Circuit Court of Appeals shall govern; that in the absence of both, the well-recognized customs of merchants, if ethically and economically sound, shall govern, even if they are contrary to the rules adopted by the state courts.

Can the law of warehouse receipts be codified? The argument has been made that the law of warehousemen cannot be codified by reason of the great diversity of the business. While it might be difficult to codify the whole body of the law of warehousemen, such a task is not impossible. When the law of negotiable instruments was codified, no attempt was made to codify the whole law of banks and banking, although that task was not insuperable. The experts who have been appointed are not to undertake to codify the whole law of warehousemen, but to codify the law of warehouse receipts.

When the law of negotiable instruments was codified, it was divided into several parts. The first dealt with all negotiable instruments. Then rules were laid down which were peculiarly applicable to bills of exchange; another part dealt with rules peculiarly applicable to promissory notes, and then rules peculiarly applicable to checks. The same system of classification can be readily followed by the experts in preparing a code governing warehouse receipts. Then separate rules

can be given applicable to warehouse receipts of a particular character, or pertaining to a particular kind or class of commodities.

The work assigned the experts is a stupendous one. They have not the example of any previous code upon the same subject. The text-books discussing the subject are not of the highest type of scholarship. The statutes are many and diversified. The judicial decisions are numerous and conflicting. There are many customs and usages which have not yet been embodied in judicial decisions. The work should be prepared with the greatest care and thrown open to the public for criticism and discussion. The admonition of Charles McKeehan of the Philadelphia bar, in summing up the controversy over the negotiable instruments code, is worthy of consideration. He said: "Finally, the whole controversy should serve as a useful lesson to those who will in future direct the preparation of statutes codifying other branches of the law in this country. The negotiable instruments act was originally drafted with the greatest care by a learned expert. It was then revised by a sub-committee of the Commissioners on Uniform State Laws, and was then revised by the Commissioners themselves at their annual conference. In addition to this, the statute, prior to its adoption by the Conference, had been brought to the attention of a number of experts generally throughout the country, and had received at least some consideration at their hands. Moreover, all who shared in the preparation of the act enjoyed the very great advantage of having before their eyes the English bills of exchange act which offered suggestions on every important point; afforded a constant opportunity for useful comparison; whose provisions moreover could be examined in the light of twenty years' experience. In spite of all this, some errors (precisely how serious no one can say as yet) crept into the negotiable instruments law, which might have been avoided had the act, prior to its final revision, been subjected for several years to the most searching criticism obtained by giving to it the widest publicity and by soliciting the widest co-operation of the considerable number of men whose knowledge of the law of negotiable paper, whether from the standpoint of the banker, the practitioner or the student, had fitted them to render valuable assistance in the preparation of a code on that subject. The two or three additional years consumed by pursuing this method would have yielded an ample return, and those who would object to the labor, expense and time required by this method little appreciate the gravity and difficulty of the task of embodying the law in a series of authoritative abstract propositions. Many will regard the shortcomings of the negotiable instruments law as not very serious, but all may well remember that these shortcomings (such as they are) can probably be ascribed to the lack of adequate criticism."

The Conference of Commissioners on Uniform State Laws should be provided not only with money with which to pay experts, but also funds with which to have printing done for a wide distribution of the proposed code, thoroughly annotated, with reference to the source of each provision and detailed explanations. The code should be sent throughout the country to all warehousemen and experts on this branch of the law and business. All criticisms should be compiled and reported to the Conference of Commissioners. The code and the criticism should be fully discussed by the Conference and the discussion printed and distributed. At least a year should be taken for their careful reconsideration. This work requires money, and the Conference of Commissioners' sources of revenue are limited. Will it not be wise for the American Warehousemen's Association to make provision so that the Conference will not be hampered by lack of funds in its work?

In the town of Dixon, Solano County, Cal., four acres of barley were growing lustily on January 1, and ripening despite the winter season.

A REMARKABLE VOYAGE.

The journeyings of a cargo of wheat shipped from Oregon to Europe have emphasized the abnormal conditions existing in wheat for the 1904 crop year. The grain, about 40,000 bushels, went to Antwerp from Oregon and was stored for a time in Antwerp; then it was purchased for milling purposes by McLaren & Muir, and was brought back to the United States by them, arriving in New York harbor on January 1. This is said to be the first time that exported wheat was ever brought back to this country by market conditions not arising from a corner, or, as was the case only two or three years ago, because the cost of keeping it afloat, owing to exceedingly low ocean freights, was less than of putting it in store on either side the Atlantic.

OMAHA DOING BUSINESS.

Omaha newspapers, at least, have become very much "swelled" over the business of that town recently as a grain terminal. Elevator building is on, at least, and recent rates to the Gulf ports have enabled Omaha shippers to turn considerable corn that way that, perhaps, should, at any rate, aforesaid would, have come on to Chicago—1,200 cars in December alone, it is claimed.

How far the new Omaha Grain Exchange has caused this local activity, and so been responsible for the movement at Lincoln, need not worry one, but at least it is true that a movement has been started to perfect trading facilities at Lincoln by the creation of an exchange market that shall bring the buyers and brokers located there into closer touch than is possible when deals are transacted by dealers going from office to office. Alex. Berger is promoting this movement, which, if developed properly, ought to facilitate trading at Lincoln.

Kansas City also has lost some of the grain that Omaha has been handling and sent on through bills through that city, the rates from Nebraska points via Omaha to the Gulf being materially better than via Kansas City—whereat the latter complain to their local carriers.

WHAT THE VIRGINIA DEMURRAGE LAW IS DOING.

In his report to the Virginia Board of Trade at its annual meeting in Norfolk, the president, Charles W. Priddy, told of the work he and the Board's executive council had done in connection with the demurrage rules of the State Corporation Commission. When the railroads appealed to the state Supreme Court, after the rules of the Commission were promulgated, Mr. Priddy, with the authority of the executive council, employed counsel, who united their efforts with those of the attorney-general, with the result that the rules of the Commission were sustained. The president said further:

"In order that you may better understand what the adoption and enforcement of these rules mean to the shippers of Virginia, I would state that at the hearing before the Commission the manager of the Virginia Car Service Association testified that their annual receipts from demurrage and other charges amounted to \$70,000 or \$80,000, the greater portion of which, we think and contend, was unjustly collected. The best authority I have been able to consult on this subject tells me that the present rules will reduce these charges, on the same volume of business, more than 50 per cent and thereby make a saving to shippers of from \$35,000 to \$50,000 per year. Besides, we have also had the transportation people penalized for failure on their part to perform certain duties or give satisfactory service, and thus, you see, aside from the above-mentioned saving, we have a strong guarantee of better service.

"There are many other matters of detail and minor importance which have claimed our attention, and which we feel have been corrected, to the advantage of not only our own membership

but the business interests of the state at large. I, however, respectfully submit that if we have accomplished nothing more than the regulation of this car service and demurrage matter, we have done enough to commend this organization to the business interests of the state, and to demonstrate the importance, if not absolute necessity, of such an organization."

CORN AS PERISHABLE FREIGHT.

On December 12 the Boston & Maine Railroad gave notice that it would for the thirty days following handle new corn as "perishable freight." The same order was understood to have been given its employees by the New York, New Haven & Hartford Railroad, although no public announcement to that effect was received from the latter road at the Boston Chamber of Commerce. The order from the Boston & Maine was sent out by the general superintendent and created much favorable comment on the part of New England grain merchants. So far as the knowledge of grain merchants at the Boston Chamber goes, this was the first time that corn has been officially treated as "perishable" freight by any railroad.

REINSPECTION AT TACOMA.

Certain cars of oats (800 tons) were shipped from Minneapolis to San Francisco via Tacoma, the grain being consigned to dealers at the latter point, to be stopped in transit for packing for reshipment. The B/L's had the state weigher's certificate attached, but no inspector's documents. The question arose, was the grain subject to inspection at Tacoma? The problem was submitted to the attorney-general of Washington, who, among other things, said:

The grain seems to fall clearly within the provision of Section 18 of the Grain Inspection Act, for it is not consigned to a destination outside of the state, but to dealers in Tacoma.

The fact that the waybills are marked "Shipment for export to other points" is certainly not a consignment to parties in other points. It is not simply passing through the state of Washington in transit, but, according to your statement, is unloaded and placed in warehouses for storage. Whether the bills were accompanied by inspector's certificates of the state whence the grain was originally shipped, I think is entirely immaterial. If the grain is subject to the inspection laws of our state, the fact it was inspected in some other state, which was evidenced by inspector's certificates, would make no difference.

Inspection laws do not constitute regulations of commerce within the meaning of the constitution, and therefore the several states, in the proper exercise of their police powers, and in the absence of legislation by Congress, may enact inspection laws which will apply to subjects of interstate and foreign commerce. The right of the state to pass inspection laws is expressly recognized so far as foreign commerce is concerned, in Act 1, Section 10, of the United States Constitution. The same principle applies to interstate commerce.

But, aside from the state's collection of fees, who benefited by this inspection?

TRIBUTE TO E. P. BACON.

The following document was on January 7 telegraphed to the Interstate Commerce Committee, House of Representatives, Washington, D. C.:

As members of the Chicago Board of Trade, we desire to testify to the high character, pure-mindedness and unflinching integrity of Mr. E. P. Bacon of Milwaukee, now representing the shippers' interests of the country at Washington. Mr. Bacon is a man and merchant of exceptionally high standing and worthy of the respect and confidence of everyone. [Signed by] Wm. J. Pope, Wm. N. Eckhardt, R. S. Lyon, J. C. F. Merrill, John J. Bryant, Geo. A. Hellman Jr., Wm. S. Warren, Fred. W. Smith, W. P. Anderson, E. H. Noyes, Robert Bines, A. Seckel, William Nash, D. S. Lasier, Edw. Andrew, H. F. Dousman, J. S. Templeton, H. B. Slaughter, James Crighton, Israel P. Rumsey, Hiram N. Sager, Wm. S. Jackson, George F. Stone, B. Frank Howard, John T. Sickel, George S. Bridge, B. A. Eckhart.

FACTS AND FIGURES

Two French subsidized ships sailed this month from Portland, Ore., in ballast, unable to obtain cargoes.

Denver the other day received a car of corn from Nebraska that weighed 105,000 pounds, said to have been the heaviest car of grain ever shipped westward.

The hearing ordered by the Interstate Commerce Commission to investigate complaints against the Louisville railroads, at that city, on December 14, was postponed indefinitely.

The North Dakota Legislature, on January 5, adopted a joint resolution protesting against granting any facilities to millers to import and grind Canadian wheat even for export.

California's maximum wheat production was 41,984,900 bushels, in 1889. The production did not fall below 21,000,000 bushels until crop of 1902, except in 1898, when only 12,403,700 bushels were harvested. In 1902 the yield was 18,759,490 bushels; 1903, 14,880,990 bushels, and in 1904, 15,862,500 bushels.

The first shipment of Canadian wheat to be delivered to Duluth this year, or for about a year and a half, consisted of seven cars, about 5,000 bushels, and reached that city on January 1. The cargo was placed in bond in Elevator B of the Consolidated system, where it will remain until the opening of navigation for exportation to Liverpool.

To show the amount of shrinkage in corn this year, members of the firm of the Wallace Publishing Company gathered ears of corn early in the fall and measured them and then hung them up to dry. The following results were shown: An ear of corn picked October 5 weighed at that time twenty-one ounces, and was nine and one-half inches in length. On November 11 this same ear weighed thirteen and one-half ounces and was eight and one-half inches in length. Similar results were obtained from other ears.

The bean crop seems to be shy again. Following the poor showing by Michigan, there comes a report from a New England authority showing that up to nearly January 1 receipts from home and foreign sources combined at seaboard points were 31,000 packages less and the exports 8,500 sacks more than last year, a shortage of 40,000 sacks. New York stocks were estimated at not over 75 per cent of last year at the holidays time, while at same time of 1903 there had been practically 100,000 bags bought for December and January delivery, as against none at all this year. That no help can be expected from the Canadian crop is shown by the fact that pea beans, with the 45 cents duty and the freight charges added, could not be brought to this side for less than \$2.25 per bushel.

The annual corn growers' and stockmen's convention at the University of Illinois, will be held at Morrow Hall, January 23 to February 3, 1905. Every farmer is invited to attend this convention. It is not a short course in agriculture, but a convention of practical farmers, at which for two weeks daily a morning session of two hours will be devoted to the discussion of such questions as are of prime importance to the Illinois farmer of today. For one hour each afternoon lectures will be given upon topics of general interest to Illinois agriculture. The rest of the day will be devoted to practice in corn judging, live stock judging, farm mechanics and dairy work. Regular classes will be conducted as indicated by the program, and different sections are arranged so as to accommodate a large number who desire to work in these lines. A daily program is published for the convenience of those in attendance who desire to know the time at which particular subjects will be considered; it will be adhered to as published as closely as possible.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JANUARY 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

CONGRESSMEN SUPERSENSITIVE.

The savage attack upon Mr. E. P. Bacon in the House committee on interstate commerce on January 6 is indicative, probably, of the exceeding sensitiveness of congressmen to public opinion at this time rather than a desire to humiliate Mr. Bacon personally. It was, however, an exceedingly gracious act on the part of some 25 to 30 members of the Chicago Board of Trade (a number which might have been increased ad libitum were it necessary) to voluntarily telegraph to the said committee their testimony "to the high character, pure-mindedness and unflinching integrity of Mr. E. P. Bacon."

Mr. Bacon's offending was the statement attributed to him (erroneously, Mr. Bacon declares) that "three-fourths of the members of Congress owe their presence in that body to railroads"—a libel on Congress, Mr. Mann (Chicago) of the committee declared, with considerable heat, following up this declaration with a "broil" of Mr. Bacon on general principles.

All this was entertaining to the audience, of course, but hardly an answer to the point of Mr. Bacon's openly professed contention, that it is and has been exceedingly difficult to get any railway reform legislation through Congress on its merits, whatever the reason. Congress, like most legislative bodies, has been very careful in the past to conserve railway property and vested rights, as though that were the only property requiring legal protection, but has not been so thoughtful of the greater millions of property whose value, in so far as that depends upon speedy and cheap distribution, is controlled, to greater or less extent, by the action of the railways.

The good faith of the protestants, of whom

Mr. Mann was the mouthpiece in committee, will be measured hereafter, at least, by their acts rather than by the fierceness of their sarcastic attacks upon Mr. Bacon, a man who more than any other one man in Washington at this time represents the shippers appellant of the country.

VERY COSTLY INSURANCE.

At the request of the Interstate Commerce Commission, Secretary Stibbens of the Grain Dealers' National Association has compiled an elaborate exhibit indicative of the amount of freight paid by grain men in the surplus grain states of official classification territory. We say "indicative" because, as will be seen by the tables below, the exhibit covers only a very small fraction of the dealers who would be affected directly by the enforcement of the uniform bill of lading. The figures given are for the fractional year, January 1, 1904, to December 10, 1904:

Number of shippers reporting	377
Number of pounds of grain shipped.....	6,009,670,105
Amount of freight paid.....	\$11,279,922.16
Amount of claims filed.....	121,713.25
Amount paid by railroads on claims.....	18,551.17
Per cent ratio of amount of claims paid to amount of freight paid.....	0.0016
Per cent ratio of amount of claims paid to amount of claims filed.....	10.31

The following figures are given for Ohio shippers only for the full year, 1903:

Number shippers reporting.....	42
Number pounds shipped.....	243,314,651
Amount of freight paid.....	\$496,717.17
Amount of claims filed.....	2,055.37
Amount of claims paid.....	1,072.63
Per cent ratio of amount of claims paid to amount of freight paid.....	0.004
Per cent ratio of amount of claims paid to amount of claims filed.....	52.1

The attorney for the shippers at the Commerce Commission hearing last month at Chicago said that the total amount of all claims paid to all shippers did not aggregate 1 per cent of the total amount of freight paid. Here it is shown that in the grain trade the amount of claims paid aggregates only about sixteen-one-hundredths of 1 per cent, and yet the grain trade has been asked by the uniform bill of lading people to pay an insurance of 20 per cent of their rate to get the protection the common law gives to all shippers, unless they are forced to waive their rights!

AN OUTRAGEOUS PROPOSITION.

Mr. Delano, lately general manager of the Burlington, in October, 1903, at Minneapolis, proposed tentatively, in an address on railway relations to grain dealers, as the ultimate evolution of the rate problem, a "trainload rate." But even Mr. Delano did not take his own suggestion seriously—Mr. Delano is much too fair a man for that; and it went into "innocuous desuetude."

Recently, however, H. V. Jones' Commercial West, with characteristic air of original and excessive wisdom, has revived it, saying—

There is the proposition of equal rate to all shippers. This sounds fair, but is it? No business is done on a basis of a like rate for all service. The railroad has been in the habit of giving the large and steady shipper a lower rate than it has given to the shipper of an occasional carload. This presents a difficult question as to just where the line of equity should be drawn. If we go to the postal department we say that the postal rate is the same to all, and quantity does not enter into the transaction. . . . A firm sends out one hundred letters to go by one hundred different routes, and the service costs as much for each letter of the

hundred as it does to carry the single letter that the individual may place in the care of the post-office. The shipper of fifty cars of flour, however, sends the whole trainload to one point, and the railroad can do it with much greater economy than it can haul one carload of wheat that some farmer may set in on a sidetrack to go to the terminal market. The relation of the cost of service to quantity is recognized in all lines of business as a natural principle. While it is admitted that the railroads are quasi-public, we are not clear that this carries with it the idea of like rate, without regard to quantity of service, etc.

So profound an economist as the editor of the Commercial West understands, of course, that the railway is an impersonal utility and that discrimination is the burden of the entire present railway problem. And he ought to understand also that once the now maximum rate unit, the carload, should be passed and a greater unit made with a still lower rate, all safeguards against discrimination would be at once broken down by the new rate itself. Few shippers in any trade can at any one time ship a trainload; but those handling the great staples, like grain, who could do so, would by virtue of this lower rate eventually overcome all lesser competitors, and in every line of trade a force would be created that would act as a perpetual disturbance against which "sagacity, energy and integrity would contend in vain," and which ultimately would destroy all but the favored few. It is amazing the Commercial West cannot see the fallacy it presents, than which no more vicious commercial theory could well be devised.

TRACK VS. HOPPER SCALES.

The argument of Inspector Radford of Kansas on the proposition to substitute track for hopper scales in the public elevators of Kansas is printed in full on another page, on the assumption that it is an exhaustive defense of the track scale. Mr. Radford is undoubtedly a conscientious official and sincerely in earnest; but in this matter there is reason to believe his zeal has outrun good judgment; for barring the saving of 25 cents per car in the weighing fee (although one does not understand how such saving can be made unless the railways are charged with the extra expense of handling cars necessitated by the track scale), there is hardly a point of Mr. Radford's brief for the track scale that has not been refuted by experience; it being, of course, the avowed object of weighing to get at the exact weight and not an approximation thereto.

Taking, first, the question of reliability, it is of record in the Chicago Board of Trade weighing department that during the year 1904 56 per cent of the track scales tested by that department were condemned as inaccurate as against only 31 per cent of the hopper scales. Yet even this does not tell the whole story; for while upon the hopper scale it is possible to easily detect a variation of 20 to 50 pounds in 1,000 bushels, the error upon track scales may run into the hundreds of pounds without detection. And this for good reasons. Because of the enormous wear and tear, the life of the track scale is necessarily short; the rough manner of running cars upon the scale affects the nicety of its adjustments; the wind affects the draw of the scale when the weight is being taken, even to

such an extent that during a high wind it is often necessary to wholly suspend weighing; while the influence of rain and snow and sunshine is of course self-apparent. It is of record that the elements alone have caused an error of no less than 2,300 pounds in the weight of a single car weighed on a track scale. It must always be recollected also that the destructive conditions under which the track scale must be used require in its construction a complication of mechanism that creates unavoidable friction not incident to the hopper scale, and this very condition makes it harder to detect error in the track scale than in the hopper type. It is rare that a hopper scale will register an error of two bushels per 1,000, and even an error of one-quarter of a bushel to 1,000 is readily detected, but to find an error of two bushels per thousand on a track scale would require a very large amount in test weights. Stealage might be more readily detected at a track scale, there being no chance for loss of grain between car and scale; but it is not a difficult feat for an expert to steal at a track scale, while in all well-regulated elevators of to-day there is little chance for manipulation of the grain between the car and the hopper scale, especially where weighing is supervised, as it now is, on behalf of shippers in all markets which pride themselves on their methods.

It is a thankless task to antagonize any sincere effort for reform; but to gain applause the reform must be reform and not a step backward, however well-intentioned.

NEW CORN PERISHABLE.

The Boston & Albany, and perhaps one other New England road, issued orders to their employes that new corn for thirty days from December 15 last would be considered perishable freight and should be so handled. The order was a boon to New England dealers and to feeders who were suffering for grain, since it expedited the movement of greatly needed corn.

But why limit the order to thirty days? New corn is always perishable freight in winter when the temperature is above freezing; and is the more perishable as the temperature rises and humidity increases. Unless the railways are able to guarantee freezing weather during the entire time of transit, every shipment of new corn they handle is liable to go wrong before reaching destination, under the influence of a change of weather.

CODIFYING COMMERCIAL LAW.

The excellent work done in behalf of the American Warehousemen's Association by Mr. Barry Mohun of Washington, in making a compilation of the warehouse laws of the various states and the decisions thereon, is about to be repeated in the form of a codification of the law of warehouse receipts, Mr. Mohun and Prof. Sam'l Williston of Harvard Law School having been selected by the said association to do this work. Some reference is made to this work in the address of Hon. Francis B. James, printed on another page.

It is one of the inconveniences of our otherwise admirable dual system of national and state governments that there is an almost unlimited

variation in the laws governing commercial transactions, all of which may be proper enough per se, although resulting in much confusion to those engaged in interstate commerce and trade.

It does not now appear that this variation can be avoided, but there does seem to be an accelerating tendency to place, item by item, the control of all commercial affairs in the hands of Congress; and in the future—not near, perhaps—this control may become dominant. Compilations like those named at least have the merit of emphasizing the need of uniformity in such matters.

VIRGINIA'S DEMURRAGE LAW.

The cause of reciprocal demurrage state legislation has received a tremendous impetus during the past year by the action of the Virginia Supreme Court in sustaining the rules promulgated by the State Corporation Commission to give effect to the reciprocal demurrage law of that state, first brought to the attention of Northern grain dealers in these columns more than a year ago, and by the wholesome effect of the operation of those rules.

The saving in demurrage charges has been a very large proportion, 50 per cent, it is estimated, of the total amount previously taxed against shippers; and besides, there has been, according to President Priddy, of the Norfolk Board of Trade, much better service on the part of the carriers, with the assurance of still better service in the future as the roads come to realize that penalizing is certain to be the effect of inefficient service.

These facts will of course have their influence on the legislatures of Wisconsin, Michigan and Indiana, and of other states, where bills for such laws may be offered for passage.

BUYING ON MERITS.

Selling grain on its merits is a favorite topic with the farm journals. Most farmers talk that kind of shop around the grain office stove; but it is quite certain that the immense volume of No. 4 and worse corn, for example, comes from nowhere but the farmers and that No. 2 corn grows only in the cleaning and drying houses of terminal elevator companies. The farmers, the Des Moines Farmer says, cannot sell grain unless dealers buy grain on its merits; and in the same sentence congratulates the "disposition of the Iowa association dealers" to do so, being "actuated by enlightened self-interest." That's just it. Few grain buyers are likely to turn down high-grade stuff; but until farmers take the pains to grow good grain, to properly harvest and cure and clean it before hauling to the elevator, keeping the screenings at home to feed to their own poultry or stock, and to destroy the weed seeds, the dealers' ability to buy, except on the demerits, is reduced to a minimum. There must always be an offer of meritorious grain before there can be a buyer.

The North Dakota legislature, with characteristic fatuity, on January 5 adopted a joint resolution protesting against allowing millers to grind for export a mixture of Canadian and domestic wheat with drawback privileges. But the privilege has been allowed and wheat has

advanced. When legislators again begin to look beyond the rims of their spectacles to find the effects of causes they think they can see but are too indolent or too ignorant to analyze, the day of statesmen in American state legislatures may return.

CO-OPERATIVES AS IMITATORS.

It is one of the curious facts of our economic history that Americans seem to profit but little from the experience of the past. Assuming, perhaps, that as our material and political conditions have always been unique, we have insisted on working out our own problems in our own way. Bismarck once said that at more than one crisis in our history in his time he had expected to see a collapse; yet somehow the Republic has always regained equilibrium. This is assurance of stability; but it does not insure us from traveling in a circle, economically speaking.

During the period of activity, political and economical, of the Granger movement of thirty years ago, for example, the Grange found other fields of activity than warfare on railroads. This was (1) the planters' credit system of the South, still a mitigated curse to that section; and (2) the co-operative buying and selling system of the North, which in this state for a time forced many retailers out of business, but which in the end resulted only in the creation of one of the greatest mail order houses in the world—a private property. The co-operative stores that then were very common were for a time quite successful; but in the end, all failed and are now only a disturbing memory.

In co-operative selling the same fate met their efforts. A granger commission firm at the Union Stock Yards failed after a brief career; in Iowa in 1874 two-thirds of the grain elevators in the state were in grange hands; and yet of all the co-operative efforts of those days only a few co-operative, or mutual, farmhouse insurance companies remain to this day.

All this experience in co-operation was had under the most favorable conditions; nevertheless, in spite of such experience, with wide margins both in buying and selling to go on, all those ventures were unprofitable.

So now, in spite of sporadic cases of success in the Northwest, the co-operative grain companies are as unprofitable as were those of the '70s of which they are imitations. Much has been said in some of the agricultural papers of their success, especially in Illinois; but we have reliable information that enables us to say that of the many companies in this state, not a baker's dozen are able to show to-day a profit on 1904's business. By slow but certain evolution they are passing into the hands of the few men who guarantee their paper, for nearly all are borrowers. Some have paid their debts by "increasing capital stock"—another way of "kiting" their loans; while one of the most favorably situated companies in the state, located at a perfectly ideal station, has not made a dollar except on its option business!

It's the old story of 1878—even, in some places, to the then common charge that failure was due to dishonest agents who handled the funds.

EDITORIAL MENTION

In some of the Western states elevator men have to look out for the thrasher's as well as the landlord's liens on grain.

Now that rates Eastward have been boosted, cars, which a fortnight ago were not to be had at all, are plentiful—going begging, in fact.

Government crop reports may be "frenzied"—sometimes they do sound that way; but where is the "private expert" who will cast the first stone? Don't crowd.

Secretary H. G. Miller has issued the semi-annual edition of the directory of the regular grain dealers of Nebraska, being the nineteenth list so authorized. It is corrected to January 1, 1905.

Secretary G. C. Julius Spoerri, Milwaukee, has issued an official directory of Wisconsin grain dealers. The book contains also the constitution and by-laws of the Wisconsin Grain Dealers' Association and the arbitration rules of that association. The price is \$1.

John B. Daish of Washington is a candidate for member of the Interstate Commerce Commission. If familiarity with railway methods and railway law is a qualification for such an office, few men in the country are more fully equipped for the position than Mr. Daish.

The weighing department of the Kansas City Board of Trade has employed a scale expert who has been equipped with an ample supply of test weights and facilities for testing scales. His services are at the disposal of all shippers to that market on payment of actual expenses only.

That choice collection of good fellows and wide-awake business men, the Grain Dealers' Association of Nashville, Tenn., had its annual banquet on January 12 at the Maxwell. Those who know Nashville and the Maxwell will understand that it is not necessary to go into particulars.

Secretary F. D. Coburn has issued his annual exhibit on paper of the agricultural products and live stock of Kansas for 1904, aggregating in value \$367,301,028.77!—a statement that all Kansans "post conspicuously" and proudly; and still Kansas has done better than in 1904.

While the millers of Minneapolis are non-committal on the prevailing movement for railway rate reform, the grain men, on the other hand, support it generously. Millers thereabouts have been so generously treated in past years by complaisant roads out for traffic that it really would be ungenerous now for them to go back on their friends, even to the extent of encouraging legislation that might contribute to

a condition in which the roads would be protected against their chronic tendency to cut their own throats.

The Kansas Federation, organized to secure a reform of railroad rates and management in that state, will be of the lobby this winter at Topeka. Unfortunately, the Federation were on the wrong side of politics in November, and may be more or less out of favor for that reason.

Some heads fell into the hopper where the "Has-beens" of the Chicago grain inspection office go—"whose services are least required." It is "none of our funeral" of course, but is it merely a coincidence that the Bidwill family suffer conspicuously, in spite of their long years of service in the department?

A movement has begun in Michigan, promoted by the grain and coal dealers, to get relief from the vexatious car service rules in force in that state. To these classes of shippers and receivers the Virginia demurrage law appeals forcibly; and it is understood that the state legislature will be asked to enact a law on similar lines.

President Spencer of the Southern Railway, to the commerce committee, objecting to the proposed amendment to the commerce law, defended the present law, which the roads had "confidence in." Mr. Spencer confesses that rebates are wrong; then why object to making a law to stop a wrong that the roads for a generation have confessed themselves unable to put a stop to?

It is announced that the quarantine against Texas grain and cotton seed, on account of boll weevil, has been raised. The weevil is, of course, a serious matter with Southern planters; but we believe it is now agreed that it is not distributed in grain. The ordinary grain weevil is so much in evidence in the South at all times there was hardly room for the boll type in the grain pile.

Owing to the fact that certain matters in Indiana require the immediate and personal attention of the officers of the Indiana Grain Dealers' Association, the annual meeting of that body, announced to be held this month, has been postponed until February 8 and 9 at Indianapolis. The secretary will furnish further information as to the program later. Let every dealer be prepared to attend.

The Society of Equity doctrine of a small crop and high prices as a more desirable condition than a big crop and moderate prices finds its logical conclusion in the craze of those Southern planters who began burning their cotton and would burn enough more to bring the price back to the mark paid last year. Such a doctrine is monstrous. Cotton at 6 to 6½ cents will give the planter a living, maintain his animals and pay storage and insurance to carry it over, perhaps to a short-crop year. It is worth a little more than 6 cents now in New York,

with futures still higher; so that to burn cotton that would support its growers and give work in the mills to thousands of operatives would be pure wickedness and waste of God's bounty. The doctrine of making wealth by scarcity never took a more vicious form than applying the torch to cotton.

The Eppinger scandal is again on the judicial boards at San Francisco. The trial of Jacob Eppinger, it will be remembered, was a miss, the jury disagreeing. Now the grand jury is trying to hold some of his witnesses for perjury, and a complete ventilation of the phenomena of that trial is expected.

The field of usefulness of the grain drier in the South will not be confined to conditioning Northern corn for export, but may be called on to put damp rice in condition to store. Southern methods of harvesting rice subject the grain to all those conditions which make so much tough wheat and corn in the North. As rice elevators especially increase in numbers rice driers are destined to be common in the rice country.

Some 50,000,000 copies of the uniform bill of lading have been printed and will be offered shippers east of the Mississippi by Eastern roads, although signatures are not insisted upon and will not be before April 1, at least. Until that time old conditions obtain. Nevertheless, this is good advice to the unwary: "Do not accept bills of lading or railroad receipts for grain with the notation, 'Not Negotiable'; do not sign the bill of lading."

Ex-Governor Yates, in his final message to the Illinois legislature, says he is afraid the I. & M. Canal will have to be abandoned. It looks that way—has, in fact, for some time past. The kind of guardians Governor Yates gave it, in its hour of extremity, made it quite certain that in this case the expected, rather than the unexpected, would happen. No one seems surprised at this outcome of Sniveleyism in canal management except his ex-excellency.

The state grain inspector of Washington will recommend to the legislature of that state the enactment of a law requiring assessors to make reports on crop acreage and yield, giving them power to put farmers on their oaths when making statements as to crops. This is probably the only way anything like accuracy can be obtained; and even so, unless Washington farmers are different from others, in many cases the oaths would be to approximations only, so few keep accurate personal accounts.

Time was when the University of Illinois was one of those "fresh-water colleges" which to a degree merited the sometime charge of "general uselessness." Nominally an "agricultural" college, it was, in fact, a second-rate academy trying to give farmers' sons a classical education at "half price," spoiling good farmers in embryo to make of them indifferent lawyers, preachers or literary hacks. To-day all this is changed. The University of Illinois stands on the broadest plane of multifarious

usefulness, in which every industry in this great state shares—its grain, fruit, stock and dairy farms; its mines and its factories; and with each succeeding year the state finds it more and more an indispensable factor of its industrial and intellectual life—the crown of its magnificent educational system. It deserves the most liberal treatment at the hands of the legislature.

"So many state legislatures and new governors are making drives at the railway people that there is some danger of overdoing it, and thus creating sympathy for 'the afflicted,'" says the Pope & Eckhardt Co.'s circular. "The effort at Washington may thereby be embarrassed. Rates, as a rule, are reasonable, and the Western railway officials are generally competent, excellent men. All that is asked of Congress is a measure that will secure 'a fair deal' whenever the exercise of authority to obtain it may be necessary. Chronic grumbling is unprofitable."

The Grain Dealers' Union of Southwest Iowa and Missouri will hold a meeting at St. Joseph, Mo., at the Commercial Club, on Tuesday, January 24, 1905, at 2 o'clock p. m. If necessary a night session will be held. Headquarters will be at the Hotel Metropole. The Nebraska and Kansas associations will take part in this meeting, and the secretaries of those two organizations will be in attendance, as no doubt will also a large number of their members. The receivers in Kansas City and St. Joseph and all regular dealers in Missouri are cordially invited to be present.

Consistency is after all largely a matter of sentiment only, which worries only them of thin skins and sensitive natures. And so, one need not be surprised that while the farmers of North Dakota and their representatives in Congress are "dead set" against the free admission of Canadian wheat for use in American mills on any conditions, they are quite as certain that it is only "justice" to the farmers to admit seed wheat from Manitoba free. This isn't consistent, of course, but it's business a la North Dakota; and most people, not built on the fat hog principle, are more than willing they should have the free seed and welcome.

The Wahl-Henius Institute of Fermentology of Chicago has been making for some months past a thorough and systematic enquiry into the conditions surrounding the production and marketing of brewing barley in this country, and has succeeded in interesting the Department of Agriculture in the same subject, the two investigators working in unison. The work up to this time has been limited to the collection of nearly 100 samples of type varieties of barley grown in the several states, which will be forwarded to Washington for analysis as a basis of further investigation. This work is very timely. Barley culture has been moving westward very rapidly from New York in the past few years, until it has about exhausted the "new lands," so to say; and we have now come to old-world conditions. Any informa-

tion, therefore, that will tend to assist farmers in producing good qualities and quantities of the highest priced (that is, choice brewing) barleys will add to their wealth as well as benefit the great brewing industry of the land—one of the greatest grain consumers in the country.

International jealousy has reached its limits in certain Ontario newspaper offices, whose tenants have begun advocating an export duty on Manitoba wheat sent to the United States for grinding for export under the drawback devices of the Dingley law. As such a duty would either wholly stop exports or reduce the Canadian price to an equivalent amount, to permit its sale here, the wisdom of the Canadian press is not as apparent as the noonday sun. However, there are too many sane men in Canada to permit such a fallacy to gain much headway in public opinion.

The periodical scramble for places in the state grain inspection departments has begun. Minnesota, Missouri, Kansas, Illinois and Washington have state departments, and in each of these states, there being a change of administration this year of grace 1905, a general overturning may be expected—unless the unexpected should happen. It is perfectly absurd that changes of this kind should take place as they do; but so long as the states (and the politicians) control these departments, and no civil service laws intervene to prevent, the unseemly scramble to oust experienced and substitute inexperienced men to do expert duty will continue; and business will pay the freight.

Chairman Firth and his colleagues in the management of the Eastern railway lines may be able to see through a door opening into the sunshine, but it is certain they do not propose to let anyone know it; nor do they propose to concede anything. After hearing the testimony at the uniform bill of lading hearing at Chicago and noting its disastrous effect on the contentions of the defendant roads themselves and their miserably weak defense, Mr. Firth, in announcing a postponement of the objectionable features of the uniform bill, has the unadulterated nerve to say that, "In the meantime the form of uniform bill of lading and rules pertaining thereto, as established by official classification No. 25, will 'continue' in effect. The rules as provided for by official classification No. 26 will be accepted as is now done by the carriers from shippers who may desire to use those forms." This is merely a repetition of his contention that the bill of lading in use now and in the past is the same uniform bill proposed to be put into effect—limited liability and all. If these New York and Philadelphia railroad men could but become acquainted with the people of this country living west of Pittsburg and get into touch with them close enough to realize that this country was made to feed, shelter and please the "common people" as well as Eastern "magnates," the greater part of the railway problem would be solved in short order. Western railway men are the only ones whose heads are now near enough to earth and far enough away from the Wall Street waterworks to understand what shippers of this country are

thinking and talking about—what they want and what they will eventually get.

NATIONAL RAILWAY CONTROL.

As was to have been expected, the railway interests in Congress, since the President practically endorsed it, have raised all manner of "serious objections" to the Cooper-Quarles bill, a very conservative and innocuous measure, which has been industriously misrepresented as a radical and therefore vicious attempt to give the Commerce Commission power to "make rates."

To an Illinois man, familiar with this state's railway history during the past thirty-odd years, this cackle of the carriers' lobby about "unsafe" legislation has a familiar sound. He remembers that it is just thirty years since similar objection, that "radicalism" here would ruin the railway interests of this state, failed to swerve the people or their legislators from their purpose to regulate the roads in this state, and that it is now thirty years, less a few months, since the first schedule of maximum rates made by a railway commission of this state, none of them experts in the least, went into effect; and he remembers also that although those rates have from time to time since been lowered by the Commission, the railways of Illinois are still solvent; that, indeed, railway building has never suffered a moment's check on that account since the Commission was given this power, not merely to "regulate" but to "make" rates.

Illinois was, in fact, the first state to create a "strong" railway commission—one with power—and so to inaugurate a new method of railway control in the United States; but as Illinois, as a state, is distinctly a type of conservatism in all business legislation, her railway commission, when exercising its powers of control, has at all times been reasonable and conciliatory. Since the Supreme Court impregnably established the Commission's power to make rates, the policy of arbitrating complaints, undertaken while the constitutionality of the law of 1873 was still undecided, having proved entirely satisfactory, has been continued as permanent practice, and since 1893, when the Commission adopted rules for the arbitration of differences, the railways have in most cases complied readily with the Commission's decisions; and disagreements between shippers and the roads are now as a rule brought to a speedy settlement without resort to the courts.

It is puerile for Congressmen, in the light of Illinois experience, to say that rates cannot safely be "regulated," as by the Cooper-Quarles bill, without threatening the integrity of the carriers' management of and control over their own "private interests." Illinois knows better. She knows also that as a matter of fact commission control under that law would be the gentlest and least burdensome of all checks and give the carriers what they do not exercise—self-control as to rates. Control is sure to come; it is inevitable as death. The form of it depends upon the roads themselves. If the Cooper-Quarles bill fails now and a more drastic measure takes its place in the near future, the public and the carriers will know at whose door to lay such a blunder.

TRADE NOTES

The Loomis Grain Door Company of Chicago has been licensed to incorporate with a capital stock of \$50,000.

The Jeffrey Manufacturing Company of Columbus, Ohio, will furnish the machinery for the new Chicago federal building. The company was the lowest bidder, at \$57,835.

The Foos Gas Engine Company of Springfield, Ohio, made their employes a present of two weeks' pay during the lay-off caused by changes which had to be made because of the large addition to the plant recently completed.

An unusually handsome diary and notebook for 1905 is being sent to their friends by the Mill Owners' Mutual Fire Insurance Co. of Des Moines, Iowa. It contains useful information, maps of United States and possessions, and is a convenient pocket size.

George W. Moore, president of the firm of Moore & Lorenz Co., Chicago, is treasurer of the new Krag Imperial Cabinet Co., manufacturers of steel letter files, cabinets, etc., at 123 South Clinton Street, Chicago. Mr. Moore returned the first part of January from an extensive business and pleasure trip to the Pacific Coast.

The extensive character of the operations of the Barnett & Record Company is evidenced by the fact that they have recently placed orders with Puget Sound lumbermen for 9,000,000 feet of fir timbers to be used in the construction of the new ore dock at Duluth, Minn. The contracts called for delivery within 40 days.

The Carthage Grain Door Company, recently incorporated at Carthage, Mo., with a capital stock of \$50,000, as reported, has completed its organization. J. L. Ross is president; G. R. Griggs, vice-president; J. C. McGee, treasurer, and M. M. James, secretary. A plant for the manufacture of a patent grain door to be used on freight cars will be established.

The Stephens-Adamson Manufacturing Company of Aurora, Ill., open their Chicago office to-day, January 15, in the First National Bank Building, corner Monroe and Dearborn streets. This office has been established to better serve the company's Chicago trade and also their outside friends and customers who may be, at any time, passing through or visiting Chicago.

The 1905 calendar that H. G. Morgan of Pittsburg is sending out bears no title, but an appropriate one would be "Miss Mischief." The feature of the calendar is a beautiful little girl. Aside from appealing to all lovers of children, the little lady has such an expression of innocent mischief that even the most hardened grain man will be compelled to pause and smile in sympathy with her.

Something new in the way of an advertising folder is being distributed by E. Lee Heidenreich, the well-known designer and builder of elevators, 1738 Railway Exchange, Chicago. It is in the form of a panel contained in a folding cover and shows the full-length figure of a handsome woman. Incidentally attention is called to the use of Heidenreich's Reinforced Concrete for grain storage tanks and the like.

The Webster Manufacturing Company of Chicago is out with a handsome new catalogue of nearly 350 pages devoted to elevating and conveying machinery. The book, which is an example of high-class printing, is one of the most complete catalogues of the kind ever published. It lists everything used in the handling and conveying of grain, while many of the important conveying equipments installed by the company are illustrated by half-tones from photographs. As some of the largest elevators and mills in the country have been equipped by the Webster Manufacturing Company, the book cannot fail to prove interesting to grain

dealers and millers, aside from its practical value as a complete list of elevating and conveying machinery. This book is styled "Catalogue M-3," and a copy may be had by writing the company direct.

H. R. Staggs, formerly in the employ of R. C. Stone of Springfield, Mo., has gone with the Great Western Manufacturing Company of Leavenworth, Kan., and will hereafter make his headquarters at Ft. Worth, Texas, to look after the company's interests in that state. Mr. Staggs is well known to the grain and milling interests of Texas, having spent a great deal of time in that state. In his new connection he may be expected to add largely to the prestige he already enjoys, because of the high character of the company and its well-known line of specialties.

The Borden & Selleck Co., 48-50 Lake Street, Chicago, have issued a special booklet devoted to coal yards and coal handling machinery. It contains 16 pages and shows photographs and plans of a number of coal-handling plants installed by the company. In this branch of their business, as well as in their grain elevator specialties, the company's aim is to furnish modern equipment to meet the requirements of each individual location. Grain dealers who are also interested in the coal business should send for this new booklet.

The subject of pure bred seed corn is one in which the elevator owner has more than a passing interest. If the great American staple is to be brought to its highest state of development it must be through the medium of carefully selected seed. The Funk Brothers' Seed Company of Bloomington, Ill., who are pioneers in the breeding of seed corn, have an interesting catalogue which tells graphically of the methods employed in breeding up corn. This booklet shows conclusively that the growing of corn can be reduced to a science, and also gives a vast amount of information that the corn grower and corn buyer should have.

The Iowa Board of Control recently ordered two more Bowsher "Combination" Feed Mills from the factory at South Bend, Ind. This makes six Bowsher Mills purchased in the past four years for state institutions, and the fact that these mills were bought at different times by such careful buyers as the Iowa State Board is another testimony to the merit of the Bowsher company's product. The company have added a new and powerful machinery press and shear to their machine shop equipment. Improvements of this character are being added to the company's plant from time to time, the determination being to keep the works in the most efficient condition.

The Huntley Manufacturing Company of Silver Creek, N. Y., has issued a large and attractive calendar for gratuitous distribution among those in the elevator trade. Although the mailing list was intended to include all those in the elevator business in the country, many have failed to receive it. The calendar, which will be sent to anyone in the elevator business making application for it, has in display a complete line of the Huntley Manufacturing Company's grain cleaning machines. These machines were among the first to assume predominance in this country. Each successive year has brought with it its full quota of improvements in grain cleaning machinery and Monitor Machines, by reason of a never-ceasing effort on the part of the manufacturers to increase their efficiency, the economy of operation and the durability, have held their place among the leaders. The Huntley Manufacturing Company has reason to congratulate itself. The past year has been the most successful year of its career, and although a comparison of its previous annually increasing success gave promise to an unusually excellent business for 1904, the results far surpassed expectations. Hundreds of those in the elevator business look back upon the exhibit of Monitor Grain Cleaning Machines as one of the chief features of the St. Louis Exposition. That this exhibit has made many friends and has been appreciated by elevator men in general is evidenced by the many sales effected and the numerous inquiries received re-

garding the operation and construction of the machines. Just as 1904 witnessed a large increase of business over that of 1903, 1905 bids fair to far outclass all previous records for the Huntley company.

C. A. Foster of Pittsburg favors this office with a copy of a handsome calendar that he is sending to the trade. It is a large one, 14½x21½ inches, and will make a striking addition to the office fittings of any grain man. The principal feature is a woman's head lithographed in colors, with the suggestive title of "Constance" below it. The figures on the calendar pad are large and readable, a most desirable feature.

Williams & Fitz-Hugh Co. of Memphis, Tenn., have ordered a No. 6 Hess Drier, to be installed at the Mobile and Ohio Elevator, Mobile, Ala., for the drying of export corn. This machine will have a capacity of 10,000 to 12,000 bushels daily, and will add greatly to the prestige of Mobile as an export point for grain. Work on the machine will be prosecuted with diligence, and it is expected that it will be in running order by February 10.

Elsewhere in this paper will be found the advertisement of McDonald Bros., Pleasant Hill, Mo., makers of the "Economy Pitless" Wagon and Stock Scale. This scale is unique inasmuch that no pit is required, the complete scale being above ground. The scale consists of a solid steel frame and all that is necessary to install it is to provide suitable supports for the ends. The makers claim that the "Economy Pitless" is as strong and durable as any scale on the market and fully guarantee it.

J. B. Walton & Sons of Urbana, Ill., have installed a Richardson Automatic Scale of 2,000 bushels' capacity in their elevator at Mayview, Ill. On the first day the scale was in operation 1,285 bushels and 40 pounds of shelled corn was received and weighed in over their wagon scale, dumped into the pit and elevated direct through the Richardson Scale into the car. The Richardson Scale recorded 1,285 bushels and 10 pounds as passing through it into the car. This was a loss of but 30 pounds, due to scattering and loss of grain chaff and dust, in the entire operation. The guarantee on the scale is one-fourth of one per cent, but the test showed that the actual variation was but one-twenty-fourth of one per cent.

Reynolds Bros. of Toledo, Ohio, have sent out calendars to their friends in the trade every year since 1883, and each year's issue has been more attractive than the previous ones. For 1905, however, they have far outdone all previous efforts and have succeeded in getting out something that is much above the average in this line. This year's calendar is in the form of four panels, each 9x11 inches, held together by a silk ribbon, which is also intended as a hanger to suspend the calendar on the wall. In the center of each panel is an allegorical scene, lithographed in colors, typifying an act of husbandry. Customers and friends of Reynolds Bros., who have come to look forward to the receipt of their annual calendar with the keenest anticipation, will be more than satisfied with this one.

The Joseph Dixon Crucible Company begins the new year with a special issue of their monthly house publication, "Graphite," devoted to graphite lubrication. This number has been sent to thousands who are vitally interested in lubrication in the hope of leading to a better understanding of the principles underlying the most effective use of Dixon's Ticonderoga Flake Graphite. Graphite lubrication is not a mere theory up for discussion. It is a well established fact of modern engineering and growing in importance every day as its advantages become better known. Lubrication methods must keep pace with machine and engine construction and steadily, surely, the use of lubricating graphite increases because it aids to better lubrication. Copies of January "Graphite" will be freely sent to all who may be interested in attaining better results in lubrication.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Jan. 7, 1905, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore	853,000	1,601,000	97,000	301,000	
Boston	186,000	419,000	461,000		
Buffalo	4,121,000	25,000	1,939,000	804,000	3,202,000
do. afloat	1,901,000		294,000	41,000	944,000
Chicago	1,654,000	2,265,000	2,999,000	403,000	13,000
do. afloat	713,000	124,000	90,000	17,000	28,000
Detroit	4,110,000	35,000	3,757,000	170,000	409,000
do. afloat	2,776,000				
Ft. William	172,000	896,000			
do. afloat					
Galveston	1,322,000	684,000	1,489,000	151,000	491,000
do. afloat					
Indianapolis	1,000	195,000	1,346,000	26,000	3,000
Kansas City	32,000	753,000	187,000	2,000	
Milwaukee	1,419,000				
do. afloat					
Minneapolis	3,167,000	160,000	1,405,000	9,000	26,000
do. afloat					
Montreal	237,000	549,000	494,000	15,000	6,000
do. afloat	110,000				
Toronto	16,000		3,000		
On Canal					
On Lakes					
On Miss. River					
Grand total	40,286,000	10,919,000	21,312,000	2,052,000	6,754,000
Corresponding date 1903	40,199,000	6,208,000	8,700,000	1,299,000	5,369,000
Weekly Inc.		1,342,000		69,000	
Weekly Dec.	353,000		1,630,000		154,000

EXPORTS FROM ATLANTIC PORTS.

The export of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending Jan. 7, 1905, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending Jan. 7, 1905.	For Week Ending Dec. 31, 1903.	For Week Ending Jan. 9, 1905.	For Week Ending Jan. 2, 1904.
Wheat, bushels	294,000	1,671,000	239,000	1,692,000
Corn, bushels	3,418,000	1,052,000	2,403,000	1,048,000
Oats, bushels	13,000	22,000	21,000	137,000
Rye, bushels	17,000			43,000
Barley, bushels	91,000	25,000	76,000	68,000
Flour, bbls.	112,100	330,400	53,800	432,900

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending Jan. 12 has been as follows:

DEC.	NO. 2. * R. W. WHT.	NO. 1. NO. * SP. WHT.	NO. 2 CORN.	STR. OATS.	NO. 2 RYE.	NO. N. W. FLAXSEED.
	Low.	High.	Low.	High.	Low.	High.
12	1.11 1/2	1.13 1/2	1.16	1.20 4/8	48	30 3/4
13	1.10 1/2	1.12 1/2	1.15	1.18 4/8	46	30 3/4
14	1.10 1/2	1.12 1/2	1.15	1.17 4/8	45 1/2	29 3/4
15	1.11 1/2	1.13 1/2	1.15	1.18 4/8	46	30 3/4
16	1.12 1/2	1.14 1/2	1.16	1.19 4/8	46 1/2	30 3/4
17	1.12 1/2	1.14 1/2	1.16	1.19 4/8	46 1/2	30 3/4
18	1.12 1/2	1.14 1/2	1.16	1.19 4/8	46 1/2	30 3/4
19	1.12 1/2	1.14 1/2	1.16	1.19 4/8	46 1/2	30 3/4
20	1.12 1/2	1.14 1/2	1.16	1.19 4/8	46 1/2	30 3/4
21	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
22	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
23	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
24	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
25	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
26	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
27	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
28	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
29	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
30	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
31	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
Jan.	1.13 1/2	1.15 1/2	1.16	1.20 4/8	47	31 3/4
1	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
2	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
3	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
4	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
5	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
6	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
7	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
8	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
9	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
10	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
11	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4
12	1.15 1/2	1.17 1/2	1.18	1.22 4/8	48 1/2	32 3/4

†Holiday.

During the week ending December 16, Prime Contract Timothy Seed sold at \$2.70@2.72 1/2 per cent; Prime Contract Clover Seed at \$12.50@12.75; Hungarian at \$1.05@1.15; German Millet, \$0.90@1.25; buckwheat at \$1.20@1.25 per 100 pounds.

During the week ending December 23, Prime Contract Timothy Seed sold at \$2.72 1/2 per cent; Prime Contract Clover Seed at \$12.75; Hungarian at \$0.90@1.15; German Millet at \$0.90@1.25; buckwheat at \$1.10 per 100 pounds.

During the week ending January 6, Prime Contract Timothy Seed sold at \$2.72 1/2@2.77 1/2 per cent; Prime Contract Clover Seed at \$12.75; Hungarian at \$1.05@1.15; German Millet at \$1.00@1.25; buckwheat at \$1.05@1.10 per 100 pounds.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of December, 1904:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	103,695	674,425
Corn, bushels	2,422,632	2,547,573
Oats, bushels	119,357	285,377
Barley, bushels	5,177	31,319
Rye, bushels	76,950	154,413
Timothy Seed, lbs.	6,650	5,425
Clover Seed, lbs.	7,601	6,350
Hay, tons	4,747	6,494
Flour, bbls.	153,135	579,589

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Flour, bbls.	130,526	224,709
Wheat, bushels	567,233	1,747,544
Corn, bushels	1,548,682	1,617,708
Oats, bushels	412,553	509,108
Rye, bushels	2,750	6,060
Barley, bushels	153,670	8,772
Peas, bushels	4,400	
Mill Feed, tons	2,433	1,268
Cornmeal, bbls.	3,400	2,023
Oatmeal, bbls.	7,939	9,789
Oatmeal, sacks	10,657	10,084
Hay, tons	16,250	15,800

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	2,167,548	2,774,341
Corn, bushels	16,757,000	5,831,731
Oats, bushels	3,486,055	6,342,383
Barley, bushels	2,983,111	2,831,273
Rye, bushels	149,173	264,155
Timothy Seed, lbs.	5,468,798	3,013,590
Clover Seed, lbs.	298,511	831,137
Other Grass Seed, lbs.	963,000	2,396,646
Flax Seed, bushels	352,750	89,579
Broom Corn, lbs.	2,681,740	767,000
Hay, tons	25,490	23,068
Flour, bbls.	712,600	1,006,864

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	94,914	157,200
Corn, bushels	1,187,098	1,153,916
Oats, bushels	322,014	358,798
Barley, bushels	152,000	152,000
Rye, bushels	43,198	39,106
Timothy Seed, bags	1,961	3,647
Clover Seed, bags	1,186	2,829
Other Grass Seed, bags	13,031	6,773
Flax Seed, bushels	10,408	9,407
Broom Corn, lbs.	158,508	168,845
Hay, tons	4,816	5,001
Flour, bbls.		2,207

CLEVELAND—Reported by F. A. Scott, secretary of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	37,949	78,839
Corn, bushels	2,127,473	838,776
Oats, bushels	380,218	305,451
Barley, bushels	7,352	9,134
Rye, bushels		1,840
Flaxseed, bushels	4,575	6,700
Hay, tons	4,816	5,001
Flour, bbls.		2,207

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	2,646,135	251,228
Corn, bushels	4,975,151	1,013,387
Oats, bushels	5,215,502	1,101,314
Barley, bushels	2,189,049	82,171
Rye, bushels	24,222	234,268
Flour, bbls.	322,100	174,300

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	3,163,333	2,190,656
Corn, bushels		2,831,913
Oats, bushels	1,001,585	253,584
Barley, bushels	640,914	205,286
Rye, bushels	10,848	107,88
Flax Seed, bushels	2,431,354	2,251,444
Flour, bbls.	203,515	138,590

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels		1,421,000
Corn, bushels		338,571
Rye, bushels		186,824

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	1,756,800	5,638,500
Corn, bushels	2,488,500	1,045,800
Oats, bushels	328,800	296,400
Rye, bushels	55,000	57,000
Barley, bushels	14,400	31,200
Broom Corn, lbs.	112,000	134,600
Timothy Seed, lbs.	134,580	76,840
Clover Seed, lbs.	959,330	247,990
Flax Seed, bushels	15,300	23,400
Hay, tons	2,651	1,782
Flour, bbls.	236,775	201,250
Feed, tons		346,712

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	814,020	1,259,200
Corn, bushels	338,850	265,050
Oats, bushels	547,300	622,650
Barley, bushels	2,041,450	1,835,250
Rye, bushels	112,000	134,600
Timothy Seed, lbs.	134,580	76,840
Clover Seed, lbs.	959,330	247,990
Flax Seed, bushels	15,300	23,400
Hay, tons	2,651	1,782
Flour, bbls.	236,775	201,250
Feed, tons		346,712

MINNEAPOLIS—Reported by G. D. Rogers, secretary of the Chamber of Commerce.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	11,565,950	12,264,370
Corn, bushels	1,359,100	886,200
Oats, bushels	1,677,110	2,657,620
Barley, bushels	1,580,120	1,032,480
Rye, bushels	128,180	217,190
Flax Seed, bushels	1,152,560	914,700
Hay, tons	4,032	4,619
Flour, bbls.	54,885	27,904

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	185,941	78,015
Corn, bushels	19,226	1,359
Oats, bushels	155,762	94,695
Barley, bushels	112,130	24,595
Rye, bushels		
Flaxseed, bushels	15,578	35,549
Flour, barrels	31,449	28,448

NEW ORLEANS—Reported by Fred Muller, secretary of the Board of Trade.

Articles.	Receipts.	Shipments.
	1904.	1903.
Wheat, bushels	3,600	1,095,585
Corn, bushels	390,700	190,377
Oats, bushels	74,000	300,000
Barley, bushels		12,400
Flour, bbls.	39,553	35,435

PEORIA—Reported by R. C. Grier, secretary of the Board of Trade.

ELEVATOR AND GRAIN NEWS

CHICAGO AND VICINITY.

The friends of Nic Schmidt will be pleased to hear that he has been appointed and is now installed as superintendent of the Chicago and St. Louis Annex elevators. Mr. Schmidt was for a number of years superintendent of the Alton Elevators at Twenty-second Street and the Chicago River, but when the Alton elevators were closed he was left without a position.

Witherspoon, Englar & Co. are constructing a 250,000-bushel fireproof elevator of cement and hollow tile for Rogers & Co. at Harvey, Ill. It will consist of ten circular tile bins, on cement foundations and tunnels, and will be connected to and form part of the Middle Division Elevator. Each bin will have a capacity of 25,000 bushels, with conveyor belts above and below, to old part of elevator. It will be in operation in about 60 days.

The Chicago and Rock Island Railroad Company, which recently purchased the South Chicago Elevators at the mouth of the Calumet River, South Chicago, of the estate of Charles Counselman, is constructing one of the largest size grain dryers, of the Hess pneumatic type. It is located 30 feet east of the South Chicago Elevator "D," and will be completed and in operation in about 60 days.

Harris, Scotten & Co. have recently completed a second section to their Hess Pneumatic Grain Dryer at the Santa Fe Elevator, which enables them to dispense with and close up the Iowa Elevator, leased by them of the receiver of the Chicago Railway Terminal Elevator Co. about two months ago, to increase their output of new corn. Harris, Scotten & Co. are also operating the National Elevator, and have this elevator full of corn. All the bins being filled, the main floor has been partly binned up and filled with corn to increase storage capacity.

The Nebraska City Packing Co. (or the receiver for the same, The Bank of Montreal) has sold a strip of about 60 feet along the river front to the drainage board, and the old Neeley elevators, together with the dock house, are being torn down to widen the Chicago River at this point. This will leave the new part, or brick elevator, about 50 feet from the river bank, and it will be connected with the dock by two or three towers and shipping bins (on dock), with conveyor belts and tunnels to and from the towers and shipping bins. A new foundation is being put under the walls of the brick-venered elevator, and the cracked walls are being repaired, the elevator being put in condition for service. It may not be very long before this elevator, so long out of commission, will again be in operation.

A fire was discovered at the Fitchburg Elevator, in a bin of seeds, partly burned grain and charcoal dust, being salvage from the B. & O. Elevator fire at South Chicago, last August, which was stored at the Fitchburg.

The fire was discovered at about 7 o'clock on the morning of January 10. The contents of the bin, consisting of two carloads of salvage, being seeds, pin oats and refuse from cleaning machines, which were partly burned at the B. & O. fire, mixed with charcoal dust and some moisture, had remained in the bin for several months. It was found to be in lumps, and the elevator was started up at 7 o'clock a. m. to run it over a cleaning machine or separator, to break up the lumps and get it in condition. Within five minutes after the bin was drawn, balls of live fire and sparks were running from bin to machine, showing that spontaneous combustion had started at or near the center of the bin.

There has been a number of fires in grain elevators caused from spontaneous combustion in dust piles, together with oil or oil-soaked waste or rags, but this is the first fire starting in a bin of grain, or seeds, in a grain elevator in Chicago, from this cause, that we have a clear record of for 35 years; or, in fact, first fire from spontaneous combustion in a bin of grain or other cereal in any grain elevator in Chicago.

When the fire was discovered the bin was closed, an alarm was turned in, which was promptly responded to by the fire department, and under the direction of Mr. Williams, the proprietor of the elevator, fire hose was raised to the bin floor and water turned in and the bin flooded, the fire being put out, with a damage by water of about \$200.

A compliment should be paid to the fire marshal and the men under him for the efficient manner in which this fire was handled and water retained at the seat of the fire, as in times past the department would have flooded the entire cu-

pola from the street, thereby doing a damage to grain by water of \$5,000 at least, in place of the \$200, as estimated at this fire. We know of a fire in a grain elevator with annex elevator adjoining in no danger, where water was recklessly turned into bins full of grain, that caused unnecessary damage of thousands of dollars. In this fire at the Fitchburg Elevator, common sense was used to save property, something that the Chicago Fire Department in the past has seemed at times deficient in; and if the good work is continued in, we shall agree that Fire Marshal Champion is a champion fire marshal.

EASTERN.

Charles F. Clark has opened a grain store at Kennebunk, Me.

William C. Latimer is erecting a grain store at South Coventry, Conn.

J. M. Howard & Son are building a grain elevator and warehouse at Eastondale, Mass.

Andrew Ginn of Orland, Me., will engage in the flour and feed business at Bucksport, Me.

The grain firm of Dean & Reed at Catskill, N. Y., has been dissolved, Dean succeeding to the business.

H. F. Bailey has moved his grain warehouse at Old Town, Me., from its former location to a site nearer his feed mill.

The Saco Grain and Milling Co. of Saco, Me., has purchased the building at Biddeford, Me., in which its branch flour and grain store is located.

By the arrangement which went into effect January 1 Elevator No. 2 of the Northern Central Railway, at Calvert Station (Baltimore), Md., will be operated by the Central Elevator Co.

Ernest P. Putnam has sold his grain and grocery business at Sutton, Mass., to B. Frank King. Possession was given January 2 and Mr. King's two sons will manage the business.

The John S. Metcalf Co. of Chicago is preparing plans for the 500,000-bushel elevator to be erected at Mystic Wharf, Charlestown (Boston), Mass., for the Boston & Maine Railroad Co. The foundation for the elevator is now being built.

Charles T. Willis, a grain and feed dealer of Norwich, N. Y., and who also operates a custom mill at that place, has made an assignment for the benefit of his creditors. His liabilities are placed at \$3,500, with assets of about \$1,000.

H. Clayton Manning of Plainville, Conn., has leased the feed and grain mill at New Britain, Conn., known as the M. D. Stanley Mill, and will operate it, handling grain, hay, flour and feed. Mr. Manning was formerly associated with his father-in-law, F. B. Newton, in the grain and livery business at Plainville.

Sanger E. Coburn, who is at present engaged in the grain and feed business at Dover, Me., has purchased E. A. Ireland's grain warehouse at Foxcroft, Me., and taken over his lease of the feed mill near the Foxcroft bridge in Dover. Mr. Coburn has taken possession of the feed mill and warehouse, and will operate them. He will discontinue the business at his old quarters in Dover, as his lease of the premises has expired.

The Keystone Commercial Co. of Pittsburg, Pa., is building forty warehouses on the south side of the city, three blocks above their present location. They will be adapted to handle any kind of business, including the grain business. There will also be a large fireproof cold storage and ice plant six stories high. The warehouses will be so situated as to handle freight to and from all railroads in Pittsburg. G. W. C. Johnston is president and manager of the company.

The Husted Milling and Elevator Co. of Buffalo, N. Y., has filed plans for the erection of a two-story elevator and warehouse on Prenatt Street in that city. The company's present elevator on Elk Street has proven inadequate to the needs of the business. The new building will be of brick construction and will cost \$30,000. Alfred E. Baxter, of the A. E. Baxter Engineering and Appraisal Co., is the engineer who designed the building. Construction will be begun as soon as plans are approved.

The safe in the office of J. A. Reynolds, dealer in grain, flour and feed at Albany, N. Y., was burglarized for the third time on the night of January 5. When Mr. Reynolds engaged in business he purchased a new safe. Anticipating that it might tempt burglars, and not wishing to have it blown open, he hung a sign over the safe bearing the following inscription: "This safe is unlocked. To open turn to the right three times." The first burglar made his appearance over a year ago and secured \$6 for his trouble. The second came in through a window about two months ago and carried away \$4 which he found in the safe. The third and last burglar secured \$5 in silver, and as he was evidently angry at the small amount of the "swag," he carried off the cash box and smashed

some shelves in the office. As all the knights of the dark lantern could read, Mr. Reynolds still has his safe uninjured, although at a cost of \$15.

Griffin Bros., hay and grain dealers of Fall River, Mass., have let the contract for the erection of a modern grain elevator to cost about \$10,000. Work will be commenced about March 1. The main structure will be 65 feet in height, 80 feet long and will be 38 feet wide at one end, tapering to 10 feet at the elevator end, the whole being somewhat in the form of a flatiron building. An ell will be built at one end, to be used as a storehouse, which will hold between 15 and 20 carloads. The elevator building proper will have a capacity of about 25,000 bushels. The lower portion of the building will be of brick, the upper portion of wood, covered with slate or corrugated metal.

The Grand Trunk Railway Co. has opened its Elevator No. 3 at Portland, Me., and it will be operated this winter in connection with Elevator No. 2, which has been open all season. Concerning the starting up of the elevator a recent dispatch from Portland says: "When the winter steamship season started, late in November, it was hardly thought there would be enough grain to keep No. 2 elevator filled. This holds 1,000,000 bushels and has already been jammed to its capacity. Grain train after grain train has been arriving in the city, until now, the largest amount that has been on hand here for months is ready to be shipped. With the 1,000,000 bushels in No. 2 elevator and the 1,500,000 bushels to be placed in No. 3 elevator, Portland will have 2,500,000 bushels of wheat, corn, barley, oats and meal on hand to fill any orders that may be sent to this city."

MINNESOTA AND WISCONSIN.

The Prairie Elevator Co.'s new house at Halma, Minn., is completed.

The Milwaukee Elevator Co. has closed its elevator at Winneconne, Wis.

G. F. Rahn has opened his elevator at Belview, Minn., for the purchase of corn.

The American Grain Co. has sold its elevator at Currie, Minn., to the Skewis-Moen Co.

Some repairs have been made to the Western Elevator Co.'s elevator at Claremont, Minn.

The Thomas Hanson Co. has let the contract for the erection of an elevator at Douglas, Minn.

George Marsh has closed the elevator at Avoca, Minn., and is at Slayton, Minn., for the winter.

A farmers' organization has been formed at Blooming Prairie, Minn., to buy or build an elevator.

The Farmers' Independent Elevator Co. of Arco, Minn., has installed new cleaning machinery in its elevator.

The Farmers' Elevator Co. of Butterfield, Minn., will handle live stock in connection with its grain business.

The Columbia Elevator Co. has built a large corn crib near its elevator at Appleton, Minn., and will buy and ship corn.

Wheaton, Minn., farmers are agitating the co-operative elevator question and talking of buying or building an elevator.

C. L. Todd has installed a Monitor Grain Cleaning Machine with a capacity of 600 bushels an hour in his elevator at Slayton, Minn.

McGlin Bros., grain dealers of Kimbrae and Okabena, Minn., have bought the Canton Grain Co.'s elevator at Lakefield, Minn.

The Walter Bowman Elevator Co.'s new 20,000-bushel elevator at Mankato, Minn., is nearly completed. Coal sheds are also being built.

The Farmers' Exchange Elevator at Little Falls, Minn., is closed and will not be reopened until after the annual meeting of the association is held.

The Odin Farmers' Elevator Co. of Odin, Minn., has been chartered with a capital stock of \$5,000. J. V. Jensen, John H. Berdell and others are the incorporators.

The Northern Grain Co. is erecting a 6,000-bushel elevator annex to its grain warehouse at Emerald, Wis. A gasoline engine will be installed to operate the machinery.

The Springfield Farmers' Elevator Co. of Springfield, Minn., will erect a 30,000-bushel elevator. L. E. Potter is president of the company and F. J. Sheffield secretary.

Farmers in the vicinity of Rothsay and Pelican Rapids, Minn., are forming an organization with a view to building elevators for handling their grain. A committee of nine is soliciting subscriptions of stock in the enterprise.

The Eagle Roller Mill Co. of New Ulm, Minn., will erect eight or ten new elevators within a radius of twenty miles of that city along the North-Western and the M. & St. L. railways. The elevators are to be completed before next season's

wheat crop is harvested and will be used as feeders to supply the mills with wheat. Construction work will be commenced as soon as the frost is out of the ground in the spring.

At a meeting of the stockholders of the Farmers' Elevator Co. of Ortonville, Minn., the elevator property was sold to ten of the shareholders. It is understood that these men will hold the property in trust until the reorganization of the company is effected.

The Farmers' Elevator and Mercantile Co. of Boyd, Minn., has been granted a charter. The capital stock is \$10,000. The company is authorized to deal in grain, fuel, hardware and farm machinery. A site has been secured for a 20,000-bushel elevator.

The McIntosh Farmers' Grain and Produce Co. has been incorporated at McIntosh, Minn., with a capital of \$10,000. Paul W. Carpenter is president; C. T. Lanman, secretary, and Everett Southmayd, treasurer. The company will either buy or build an elevator and will handle fuel.

Fred Wichlow has purchased John Kendall's elevator at Owatonna, Minn., and taken possession. Mr. Wichlow is an experienced grain man and had been in Mr. Kendall's employ for the past two years. Prior to that he was with the Hastings (Minn.) Milling Co. for seventeen years.

The St. John Grain Co.'s elevator at Le Sueur, Minn., which was converted into a cleaning house some time ago, received and cleaned eighty-nine cars of grain in a period of one month recently. Two carloads of mustard seed, taken from the grain cleaned there, have been shipped this season.

Farmers of Crookston, Minn., and Gently Township, that state, have organized and secured a charter under the style of the Farmers' Produce Association. The capital stock is \$5,000. The Association proposes to erect elevators, warehouses, etc., to handle grain and other farm produce.

The new office building of the Hubbard Milling Co. and the Hubbard & Palmer Elevator Co. at Mankato, Minn., is completed and occupied by the offices of the respective corporations. It is built of pressed brick with stone trimmings and is 30x70 feet in size, two stories high above the basement.

Plans are being perfected by the W. W. Cargill Co. of La Crosse, Wis., for the erection of three grain elevators along the line of the new La Crosse and Southeastern Railway. These elevators will be located at Stoddard, Coon Valley and Viroqua, Wis., and are to be completed in time to receive next season's crops.

The regular annual meeting of the stockholders of the Soo-Pacific Elevator Co. was held at Minneapolis on January 2, at which time a semi-annual dividend of 10 per cent was paid to all stockholders of record December 1. Frank I. Mason was elected president and W. H. Dezotell manager. The other officers were re-elected.

The S. Y. Hyde Elevator Co. of La Crosse, Wis., has sold nine of its elevators on the Milwaukee road between Wells, Minn., and Flandreau, S. D., to John Peart and J. M. Bennett of Flandreau and their associates. Three of the houses are at Airlie, Pipestone and Edgerton, Minn. It is stated that possession will be given July 1.

A press report from Duluth, Minn., dated January 4, says: "Present prospects are that every grain elevator at the Head of the Lakes will be filled by the opening of navigation next spring. Less than 20,000,000 bushels more of grain will do it. The houses now have 15,000,000 bushels in store, which is double the amount at this time a year ago."

Thomas A. Way of Mason City, Iowa, has sold his interest in the grain and elevator business of the Way-Johnson-Lee Co. of Minneapolis, to L. N. Loomis. The corporate name of the company will be changed to that of Loomis-Johnson-Lee Co. and the capital stock increased from \$100,000 to \$150,000. Mr. Loomis formerly operated a line of country elevators in the Northwest.

The Iowa & Missouri Elevator Co. has filed articles of incorporation at Keokuk, Iowa, with a capital stock of \$25,000. The officers are: President, N. W. Minn. The elevator at Butterfield is closed for the season and the buyer, Mr. Bell, has been transferred to another station. It is said that new cleaning machinery will be installed in the house before it is reopened next fall.

The Northern Grain Co. of Chicago has leased the 2,000,000-bushel terminal elevator at Minneapolis, Minn., owned by the Great Northern Railway Co. The lease runs for a period of ten years and J. J. Donahue will have charge as manager. The Northern Grain Co. already owns two terminal elevators at Manitowoc, Wis., and controls about eighty country elevators throughout Wisconsin, Minnesota, Dakota and Iowa. In securing the Great Northern house the Northern Grain Co. at the same time enters new territory for its grain business. The company ships grain from Manitowoc by both lake and rail.

ILLINOIS.

Campbell & Co. are erecting a new elevator at Penfield, Ill.

Construction work on the new elevator at Bardolph, Ill., is in progress.

J. A. Simpson's new elevator in Minonk, Ill., is completed and in operation.

McFadden & Co. have installed an improved Hall Distributor in their elevator at Easton, Ill.

The work of remodeling and rebuilding Miller & Graves' elevator at Duncan, Ill., is completed.

The Garfield Grain and Coal Co. of Garfield, Ill., capitalized at \$5,000, has been granted a charter.

The Brimfield Elevator Co. of Brimfield, Ill., has increased its capital stock from \$5,000 to \$10,000.

J. H. Eversole has sold his grain and coal business at Sublette, Ill., to Charles and Joseph Bettendorf.

The new elevator at Minonk, Ill., built by B. M. Stoddard, to replace the old one, is reported completed.

The Farmers' Grain and Live Stock Co. of Morton, Ill., is building a new elevator on the site of the one recently burned.

The office of the National Grain Co. at Stonington, Ill., was robbed recently, \$30 in cash and about \$3,000 in notes being taken.

Additional steel storage with a capacity of 50,000 bushels will be built at the Hunter Bros. Milling Co.'s new plant in Edwardsville, Ill.

An elevator is being built at Glenwood, Ill., for Wright & Blair. The Younglove Construction Co. of Mason City, Iowa, has the contract.

Electric power has supplanted steam in C. A. Wylie's elevator at Kewanee, Ill. The engine has been taken out and a motor installed.

The Younglove Construction Co. of Mason City, Iowa, is erecting a corn storage elevator at Bongard, Ill., for John Lowery of Fairland, Ill.

The recently chartered Bonfield Grain and Lumber Co. of Bonfield, Ill., will build an elevator at that place. The company is capitalized at \$10,000.

The George L. Hight Grain Co., Macon, Ill., has been incorporated with a capital stock of \$15,000. The incorporators are: George L., E. L. and Lela E. Hight.

It is announced that a receiver has been appointed for the Garrett Grain and Coal Co. of Garrett, Ill., on petition of several of the stockholders. The elevator is closed.

Dixon & Shuping have sold their grain business, lumber yard, etc., at Witt, Ill., to G. H. Spannagel. The consideration was \$14,000, the new owner taking possession January 4.

The Santa Fe Elevator Co. has taken out a building permit for the erection of a four-story and basement brick addition to its grain elevator on Wood Street, Chicago.

The Younglove Construction Co. of Mason City, Iowa, is just finishing a 25,000-bushel elevator and corn storage house at Fairland, Ill., for the Fairland Grain and Lumber Co.

The Colfax Grain Co., capitalized at \$8,000, has been chartered at Colfax, Ill., to deal in grain and fuel. August Speigle, D. L. Withers and M. J. Lowman are the incorporators.

The repairs and alterations to the Arcola Grain, Coal and Telephone Co.'s elevator at Arcola, Ill., have been completed and it is again in operation. Modern machinery has been installed.

Bartlett, Frazier & Carrington have taken possession of the Illinois Central Elevator at Monticello, Ill., recently purchased from Knight & Son. J. A. Bender has charge for the new owners.

The recently chartered Farmers' Grain Co. of Latham, Ill., has elected the following officers: Francis Mooney, president, and J. N. Vaughn, secretary. The company will buy or build an elevator.

A branch of the National Farmers' Exchange is now in process of formation among the farmers in the vicinity of Sterling, Ill. The promoters expect to erect a cooperative elevator at Sterling if they succeed in perfecting the organization.

W. H. Hey has sold his elevator property at Woosung, Ill., to Bartlett, Frazier & Carrington of Chicago. The elevator has been operated for the past two years by W. E. Chase & Co. and they will continue to manage it for the new owners.

Metzger Bros. have sold their elevator at Pana, Ill., to M. R. Corbett of Rosemond, Ill. The consideration was \$5,000. Mr. Corbett owns elevators at Rosemond and Millersville, Ill. Metzger Bros. are members of the Metzger-Hill Grain Co. of Cincinnati, Ohio, which has elevators in Illinois, Indiana and Ohio.

The elevator property at Elkhart, Ill., operated by George A. Bock has been purchased by Samuel Mangas of Lincoln, Ill. Mr. Bock retires on account of ill health after many years spent in the grain business. The lumber yard and cribs are included in the transfer. Mr. Mangas is an ex-

perienced grain man and was formerly in that business at Hartsburg, Ill.

The branch of the National Farmers' Exchange recently organized at Van Petten, Ill., is negotiating for the purchase of the Northwestern Elevator Co.'s house at that place. In the event of being unable to purchase the elevator it is said that the farmers will build a new one. The Van Petten branch is composed of about fifty farmers of that vicinity.

IOWA.

A farmers' elevator will be erected at Somers, Iowa.

A co-operative elevator is projected at Altoona, Iowa.

F. M. Campbell's new elevator at Randolph, Iowa, is nearing completion.

Judson & Carter are erecting an elevator at the new town of Balfour, Iowa.

The Trans-Mississippi Grain Co.'s new 20,000-bushel elevator at Castana, Iowa, is completed.

Joseph Norton, a grain dealer of Creston, Iowa, is reported to have filed a petition in bankruptcy.

The Irwin Grain Co. has succeeded Charles Escher Jr., in the grain business at Irwin, Iowa.

A movement is on foot among the farmers in the vicinity of Inwood, Iowa, to erect a co-operative elevator.

A co-operative elevator company has been organized at Pocahontas, Iowa, by local business men and farmers.

The Younglove & Boggess Co. of Mason City, Iowa, has the contract for the erection of a 12,000-bushel elevator at Tennant, Iowa.

It is expected that the Western Elevator Co.'s new elevator at Oto, Iowa, will be ready for operation about the middle of this month.

The erection of a farmers' elevator is talked of at Fort Dodge, Iowa. The Great Western Railway Co. is said to have offered the farmers a free site on its right-of-way.

A farmers' co-operative elevator company, to be known as the Sergeant Bluffs Independent Grain Co., is being formed at Sergeant Bluffs, Iowa. An elevator will be built.

A charter has been granted to the Farmers' Elevator Co. of Woolstock, Iowa. The capital stock is \$10,000, and the incorporators are Thomas Wallace, Martin Hirt and others.

D. J. Peters has bought an interest in the grain business of Jacob Peters & Son at Wellsburg, Iowa. The management of the business will be in the hands of D. J. and J. J. Peters.

C. L. Kinney has sold his elevator at Iowa Falls, Iowa, on the North-Western right-of-way, to C. H. Comley. The new owner has taken possession and will retain George Debe as manager.

The B. A. Lockwood Grain Co. of Des Moines, Iowa, has installed Howe Gasoline Engines, equipped with radiators for oil cooling, in its elevators at Polk City and Crocker, Iowa.

John A. Winkel has sold his grain, flour and fuel business at Bancroft, Iowa, to his son, John A. Winkel Jr., and will retire from active business after about twenty years spent in the grain trade. Mr. Winkel Sr. and his wife will take a trip to the Pacific Coast next spring.

The Iowa-Minnesota Cereal Co. of Mason City, Iowa, which operates a line of elevators on the Minneapolis & St. Louis and the Iowa Central railways, is negotiating for the purchase of a string of houses on the D., M. & Ft. D. Railway, which became a part of the St. Louis System on January 1.

The De Wolf & Wells Grain Co. of Spencer, Iowa, has purchased four of the elevators in Northwestern Iowa, formerly owned by Charles Counselman & Co. of Chicago. The houses are located at Ayrshire, Mallard, Plover and Ruthven, Iowa. The De Wolf & Wells Co. now owns seventeen elevators in that section of Iowa.

The Ia. & Mo. Elevator Co. has filed articles of incorporation at Keokuk, Ia., with a capital stock of \$25,000. The officers are: President, N. W. Hubinger; vice-president, J. E. Hubinger; secretary and manager, W. N. Sage; treasurer, H. W. Green, and assistant treasurer, J. H. McNamara. The new corporation is a subsidiary company of the J. C. Hubinger Bros.' Co., starch manufacturers of Keokuk. A line of elevators will be established to supply raw material for the starch factory.

Williams & Kennison, formerly of Spencer, Iowa, have started up their new feed mill plant at Fort Dodge, Iowa, and will operate it under the style of the Fort Dodge Milling Co. They will act as local agent for the Iowa Elevator Co. in the purchase of grain and are erecting extensive cribs to handle the business. The Iowa Elevator Co. operates thirty-eight elevators located throughout the state. The new feed mill occupies a building formerly used for other purposes, but which has been remodeled and equipped with modern machin-

ery for the grinding of feed on an extensive scale. Storage room for quite a large quantity of grain is provided in the mill building.

W. M. Lancaster has sold his elevator at Bradgate, Iowa, to the Wells-Hord Grain Co. of Cedar Rapids, Iowa. It is said that Mr. Lancaster will be retained as manager for the remainder of the season.

The Worral Grain Co. of Omaha, Neb., has leased a large building in Council Bluffs, Iowa, formerly used as a power house by an electric power company, and will remodel it and convert it into a transfer grain elevator. The building is conveniently located and will have direct trackage to three railways in connection with the terminal line which reaches that city from Omaha. The company has taken a five-year lease of the building and will install the necessary equipment. When the alterations are completed the elevator will have a handling capacity of twenty cars a day.

MISSOURI, KANSAS AND NEBRASKA.

Henry Roberts' new elevator at Hooper, Neb., is completed.

A. Terrill & Son have sold their grain business at Attica, Kan.

Wright & Son's new elevator at Papillion, Neb., is completed.

An addition is being built to the Wilkinson Elevator at Milligan, Neb.

P. S. Heacock has installed a car loader at his elevator in Falls City, Neb.

The Lukens Milling Co.'s new 60,000-bushel elevator at Atchison, Kan., is completed.

The Torpin Grain Co. has been making some improvements to its elevator at Nickerson, Neb.

The elevator and grain business at Humphrey, Neb., is now owned by Thomas and Doc O'Shea.

It is stated that George and G. H. Nagengast may engage in the grain and live stock business at Lynch, Neb.

A 20,000-bushel elevator is being built at Iowa Point, Kan., for B. D. Williams. G. H. Birchard has the contract.

The Farmers' Elevator Co. of Straussville, Neb., is building an elevator and pending its completion is doing a scoop shoveling business.

Farmers around Barneston, Neb., are reported to have subscribed \$2,700 toward the erection of a co-operative elevator at that place.

The Loomis Grain and Milling Co. is erecting a 60,000-bushel elevator at Loomis, Neb. G. H. Birchard is the contractor.

It is announced that J. F. Twamley & Sons will erect their proposed elevator in Omaha, Neb., as soon as the litigation over the site is settled.

A. N. Conklin of Ashton, Neb., is reported to have purchased the interests of the Jacques Grain Co. of Lincoln, Neb., at St. Paul and Warsaw, Neb.

The Hoffman Elevator Co. has been incorporated at Enterprise, Kan., with a capital of \$150,000, to take over the grain business of C. Hoffman & Son.

The Atlas Elevator Co. recently shipped a large consignment of oats from its elevator at Orchard, Neb., to Manila, P. I. The grain went via Seattle, Wash.

G. H. Birchard has completed a 6,000-bushel elevator at Nebraska City, Neb., for the Jones Grain Co. and an 8,000-bushel elevator at Alma, Neb., for W. H. Lewis.

The Elgin Elevator Co. of Elgin, Neb., has filed amended articles of incorporation, increasing its capital stock from \$10,000 to \$30,000 and fixing the paid-up capital at \$5,000.

The Farmers' Co-operative Shipping Association of Sterling, Kan., has purchased of the Borden & Selleck Co., Kansas City, Mo., an 80-ton, 46-foot, Howe Railroad Track Scale with Howe Patent Recording Beam.

The Farmers' Elevator Co. of Syracuse, Neb., has its new elevator completed and in operation. The new house is a metal-clad structure, 75 feet high, with a storage capacity of 45,000 bushels. A gas engine supplies the motive power.

The Kreeck Lumber and Grain Co. of Clay Center, Kan., will erect an elevator at Bala, Kan., and put in a lumber yard. Sherman Timmons of Scandia, Kan., will have charge as manager. This will be the first elevator to be built at Bala.

The South Park Elevator Co. has awarded the contract for the erection of a 100,000-bushel elevator at St. Joseph, Mo., to the Younglove & Bogges Co. of Mason City, Iowa. Work of excavating for the foundation will begin at once and the elevator is to be completed by April 1. The new house will be located on the Burlington right-of-way and will take the place of the one owned by the company which was burned on September 21. The old elevator was located at South Park on the Rock Island Railway. The officers of the South Park Elevator Co. are C. G. Benton of Kan-

sas City, president; Henry Lichtig of St. Joseph, vice-president, and A. J. Brunswig of St. Joseph, secretary, treasurer and manager.

The Fowler Commission Co. of Kansas City, Mo., Texarkana and Pine Bluff, Ark., is reported to contemplate erecting an elevator in Omaha, Neb. The company handles grain, hay, feed, etc.

The Rock Milling and Elevator Co. of Hutchinson, Kan., has purchased three additional lots near its new elevator at a cost of \$3,500. It is said that this tract may be used as the site of the flour mill which the company announced some time ago that it proposed building.

The foundation of the new 1,000,000-bushel elevator of the Independent Elevator Co. at Omaha, Neb., has been started and work will be continued all winter. It is said that the building will probably be completed by July, but that the elevator will not be ready for use for some time after that.

Recent Omaha advices state that the erection of elevators in that city is planned by the following Kansas City grain companies: The Hall-Baker Grain Co., the John I. Glover Co. and the Duff Grain Co. They are said to be seeking suitable sites on which to erect elevators and also for office locations.

W. H. Ferguson is building a cleaning and storage elevator at McCook, Neb., to be operated in connection with his present elevator. It will have a storage capacity of 30,000 bushels in addition to its cleaning facilities. A 25-horsepower gasoline engine will supply power for operating the machinery.

Bandt & Blauer, who operate a line of elevators in Kansas, have purchased the grain elevator and flour mill at Phillipsburg, Kan., owned by John Gebhart and A. W. Robinson and operated under the style of the Phillipsburg Mill and Elevator Co. The consideration was \$30,000, possession being given January 1.

The Uptide Grain Co. of Omaha, Neb., is to erect a 1,000,000-bushel terminal elevator in that city. A tract of ground in South Omaha has been secured from the Union Stock Yards Co. and trackage facilities provided for. Work will be commenced at once and the elevator is expected to be completed and ready for operation early in May. The new house will be built of wood and will be patterned after the company's recently completed terminal elevator at Missouri Valley, Iowa, but will be larger in every respect. It will have a handling capacity of 100 cars in ten hours. While the initial capacity of the elevator will be 1,000,000 bushels, space for the erection of additional storage tanks will be provided. The Uptide Grain Co. now owns and operates thirty-three elevators, most of them in Nebraska, but some of them in South Dakota. Seeley, Son & Co. of Fremont, Neb., builders of the other Uptide elevators, will construct the new terminal house.

THE DAKOTAS.

The Benton Packet Co. is building an elevator at Mannheim, N. D.

I. P. Baker's new elevator at Mannheim, N. D., is about completed.

The Delano Elevator Co.'s new elevator at Wheelock, N. D., is completed.

Gackle & Ziegenhagel have leased an elevator at Ashley, N. D., for the balance of the season.

J. P. Schott has succeeded Schott & Klandt in the grain and implement business at Zeeland, N. D.

A farmers' elevator company is being organized at Litchville, N. D., to build and operate a co-operative elevator.

J. D. Minium has sold his grain and feed business at Sioux Falls, S. D., and taken a position as traveling salesman.

The Powers Elevator Co. has closed its elevator at Kulm, N. D., and transferred the agent, Peter Korpin, to its house at Medina, N. D.

Morrison & O'Neil have their new elevator at Mission Hill, S. D., completed and in operation. This makes three elevators at that point.

A 15,000-bushel elevator is being built at Yale, S. D., for Thomas Gartland of Parker, S. D. The Younglove Construction Co. of Mason City, Iowa, has the contract.

C. W. Thompson's new 15,000-bushel elevator at Centerville, S. D., is completed and in operation. It was built by the Younglove Construction Co. of Mason City, Iowa.

The Younglove Construction Co. of Mason City, Iowa, has the contract for the erection of a 20,000-bushel elevator at Fairfax, S. D., for Torrence Bros. & Co. of Tabor, S. D.

The Burgess Elevator Co. commenced receiving grain in its new elevator at Sherwood, N. D., just thirteen days after the stone was unloaded for the foundation. Sherwood is a new town, less than three months old, near the international boundary.

It now has four elevators. A large quantity of Canadian wheat is being brought across the line and sold in bond. Manitoba farmers are hauling their wheat to the American side of the line, where better prices are received. There are two bonded buyers at Sherwood.

The South Dakota Grain and Shipping Association has been organized at Watertown, S. D., with a capital stock of \$25,000. The officers are: President, M. M. Fox; secretary and manager, H. E. Brook. The stated purpose of the organization is to "buy and ship grain, hay, live stock, etc., and to handle fuel, lumber and building material." Branches "will be maintained at Cactus, Palmer, Gardner, Waverly, Kranzburg, Rauville, Kampeska, Henry, Grover and Appleby, S. D." The headquarters will be at Watertown. The Association proposes to handle grain for its members at a charge of 1 cent per bushel. If a member sells his grain to a line house he is required to pay 1 cent per bushel of the proceeds into the treasury of the Association. Fuel, building material, etc., are to be sold to the members at cost, plus three per cent as commission.

CANADIAN.

P. C. Duncan, dealer in flour, feed, etc., at Estevan, Assa., is erecting a large warehouse.

The Canadian Elevator Co. has been making some improvements to its house at Regina, Assa.

Schwahn & Fair have purchased J. W. Cochran's grain and milling business at Glenboro, Man.

The Prince Albert Elevator Co. has opened its elevator at Prince Albert, Sask., and will keep it open for the remainder of the season.

The Winnipeg Elevator Co. has closed its elevator at Ste. Agathe, Man., for the season and the buyer, W. Ferguson, has returned to his home at Goodlands, Man.

The erection of a 500,000-bushel grain elevator at Courtright, Ont., is planned. If it is built it will probably divert considerable seaboard grain to the Pere Marquette road.

The excavation for the 100,000-bushel terminal elevator which the Colonial Elevator Co. has arranged to build at St. Boniface, Man., is now going on and the building will be erected in the spring.

James Caruthers & Co. of Toronto, Ont., grain exporters, are going extensively into the exporting of American corn. They will ship from Detroit and Toledo territory via St. John, N. B., and Portland, Maine.

William Donovan, an employe of the Canada Bridge Co., which is erecting a grain elevator at Windmill Point, Montreal, Que., fell from the top of the structure on December 30, a distance of seventy feet, to the ground. He landed in a pile of snow, and when he was taken to the hospital and examined by the physicians he was found to be practically uninjured. He turned four somersaults in his descent.

Letters of incorporation have been issued to the Union Grain Co. The objects of the company are to carry on the business of dealers in grain, produce and general merchandise, and of elevator owners, warehousemen, etc. The capital stock is placed at \$50,000. The incorporators are Alex. Cavanagh, Arch. D. Chisholm and William Chambers of Winnipeg; James T. Reid of Treherne, Man., and Arthur Thompson of Oak Lake, Man. The head office of the company will be in Winnipeg.

The Gazette at Carnduff, Man., states that the selling of wheat in bond across the international boundary is now on a working footing. The farmers of Elmore, Workman and Winlaw are hauling to Sherwood, N. D., and claim that they made a substantial profit, especially on the lower grades. They say they would prefer to sell there at a loss, so indignant are they at the seizures and prosecutions which they claim were stirred up by people on the Canadian side. Four elevators have sprung up as if by magic across the line, in full view of the Elmore farmers. There are two bonded buyers and, of course, the Canadian wheat goes out in sealed cars. Sherwood, N. D., is two months old. It has ninety places of business, including three banks.

The new Fort William elevator of the Ogilvie Flour Mills Co., Ltd., was put in operation on December 19. A number of the directors of the company, among them being F. W. Thomson, vice-president, Montreal; A. W. Black, manager, Winnipeg; H. S. Holt and E. L. Pease of Montreal, and F. H. Phippen, K. C., of Winnipeg, were present at the starting of the machinery in the new house. The first car of wheat was taken into the elevator, unloaded and elevated into storage bins, the electric current being supplied from the city power plant. The elevator has every modern device for efficiency and is complete in every way. The tanks have a capacity of between 500,000 and 600,000 bushels and are built on concrete foundations. There is plenty of room everywhere in the elevator for the workmen employed. The cleaning floor is

roomy and has a dust collector plant and an automatic removal device for screenings, which keeps the place in a very clean condition. The two legs of the elevator will take in about 80,000 bushels a day.

The Columbia Flouring Mills Co., Ltd., of Enderby and Vernon, B. C., is now considering the erection of a couple of additional grain elevators in Alberta and Assiniboia. The company recently completed a 30,000-bushel elevator at Lethbridge, Alberta.

WESTERN.

F. H. Adams succeeds C. E. Adams in the grain business at Sacramento, Cal.

The Gallatin Valley Milling Co.'s new 250,000-bushel steel elevator at Belgrade, Mont., is about completed.

Kerr, Gifford & Co. will erect several new warehouses between Arlington and Condon, Ore., as soon as the railway to the latter place is completed.

The Aggers-Wilson Grain Co. has disposed of its business interests at Georgetown, Wash., to the Palmerton-Harvey Grain Co. The transfer was made on December 19, and the new owners took charge of the business immediately. The old company recently completed improvements aggregating several thousand dollars.

The Washington Water Power Co. will make extensive improvements to its milling plant at Spokane, Wash., now known as the C. & C. Mills and operated by the Spokane Flour Mills Co. Three steel storage tanks, for wheat, with a capacity of about 100,000 bushels, will be erected at a cost of \$12,000. A two-story brick warehouse, to cost about \$8,000, will be built and the capacity of the mill increased from 200 to 500 barrels a day.

Farmers around Kendrick, Idaho, have organized under the style of the Farmers' Rockdale Co., and will erect a grain warehouse in time to handle next season's crop. The following officers have been elected: President, S. W. Bingham; secretary, U. S. G. Evans, and auditor, Henry Munsterman. Under the proposed organization each farmer is entitled to hold only one share of stock, and to provide against someone buying a controlling interest, no one is entitled to vote more than one share, should he make outside purchases. No proxies are recognized.

OHIO, INDIANA AND MICHIGAN.

A feed mill is now being operated in connection with the Snyder Elevator at Tremont City, Ohio.

Clay Shaw has purchased an interest in the grain business of Shaw & Bauman at West Rushville, Ohio.

The Union Grain and Hay Co. of Cincinnati, Ohio, has taken out a building permit for the erection of an elevator and warehouse in that city to cost \$10,000.

At Fountaintown, Ind., the Snider-Moore Elevator Co. has been incorporated, with a capital of \$6,000. John J. Snider, Martin Moore and Thomas H. New are the incorporators.

It is said that the elevator at Gladstone, Mich., handled 500,000 bushels more grain during December than was ever handled any previous month in the history of the port.

F. R. Pence of Pence, Ind., has about completed the addition to his elevator. The B. S. Constant Co. of Bloomington, Ill., supplied the new equipment, including the B. S. C. chain drag.

David E. Owens, who has been engaged in the grain, hay and fuel business at Lottville, Ind., for a number of years, has leased his property at that place and will locate in some other state.

The Fayette Grain Co. has been incorporated at Washington C. H., Ohio, with a capital stock of \$10,000. John McDonald, William Worthington, J. M. Willis, James Ford and E. A. Ramsey are the incorporators.

John R. Welsh & Co. is the style of a new firm at Pontiac, Mich., which has engaged in the wholesale and retail grain, flour and feed business. Mr. Welsh was formerly proprietor of the flour mill at Clintonville, Mich.

The United Grain Co. of Toledo, Ohio, has placed an order for two 100-ton 48-foot Howe Standard R. R. Track Scales, equipped with Howe Patent Type Recording Beams, with the Borden & Selleck Co. of Cleveland, Ohio.

The Branch Grain and Seed Co. has been chartered at Martinsville, Ind., to succeed to the grain business of E. F. Branch & Sons. The capital stock is \$10,000 and the incorporators are: Elliott F., Frank O. and Emmett F. Branch.

The Sidney Grain and Milling Co. has been chartered at Sidney, Ohio, with a capital of \$30,000. E. E., A. V., Earl E. and J. M. Nutt are the incorporators. The company has purchased the grain elevator and flour mill at Sidney from E. J. Griffiths & Co. The consideration was \$20,000. E. E. Nutt,

head of the new corporation, is Past Department Commander of the G. A. R. of Ohio. He sold the elevator to Mr. Griffiths eighteen years ago.

G. W. Swezey's new feed mill and grain elevator at Andover, Ohio, are completed and in operation. The plant is equipped with modern machinery and is operated by a 40-horsepower gasoline engine. The feed mill has a capacity of two tons an hour.

The National Elevator Co. of Indianapolis, Ind., is making extensive repairs at several of its elevators and equipping them with Constant's watertight elevator boots and patent chain feeders and conveyors. Some of these conveyors are over 300 feet long.

It is expected that the Fowler Grain Co.'s new 95,000-bushel elevator at Fowler, Ind., will be completed about the middle of this month. It is 93 feet high and is one of the largest structures of its kind in Northern Indiana. Cars will be loaded by means of a 65-foot gravity drop, without the use of an engine.

Louis Hartman, for the past twenty-five years engaged in the wholesale grain, flour and feed business at New Albany, Ind., has admitted his two sons, E. Alexander and H. Anton Hartman, into partnership. The change took place on January 1, the style of the new firm being Louis Hartman & Sons.

E. F. Reichelderfer, surviving partner of the late firm of John Reichelderfer & Son, will continue the grain, hay and seed business at Cridersville, Ohio, under his own name. Mr. Reichelderfer has elevator capacity of 25,000 bushels and hay barn capacity of 200 tons, located on the C., H. & D. Railway at Cridersville.

Daniel Heller, a grain dealer and lumber buyer of Wooster, Ohio, has filed a petition in bankruptcy. Mr. Heller only retired from the office of county treasurer a few weeks ago and was supposed to be wealthy. His embarrassment is attributed to the failure of the Wooster National Bank and the fact that he was the indorser for L. P. Ohlinger, its absconding president.

The Goodrich Bros. Hay and Grain Co. of Winchester, Ind., has completed its new elevator at Durbin, Ind. The new house is modern and cost about \$15,000. The company has an elevator at Westfield, Ind., and others at points along the Midland Railway. James Goodrich, one of the members of the company, is chairman of the Indiana Republican state committee. Gus Seymour will have charge of the new elevator at Durbin.

SOUTHERN AND SOUTHWESTERN.

The grain business at Mangum, Okla., conducted by M. E. Donahue has changed hands.

The Newport Milling Co. of Newport, Ky., has purchased a site and will erect a grain elevator.

The South Texas Grain Co. will rebuild its elevator at Houston, Texas, which was burned on December 4.

The Mart Grain and Elevator Co., Mart, Texas, is reported to be in the market for corn shelling and grain cleaning machinery and hopper scales.

The Felton Grain Co. has been incorporated at Dallas, Texas, with a capital of \$10,000. G. E., J. B. and H. D. Felton are the incorporators.

Lee Bros. are reported to be about to erect a three-story storage elevator, 300x150 feet in dimensions, at Memphis, Tenn. It will cost \$150,000.

It is reported that the City Grain and Feed Co. of Columbia, Tenn., will rebuild its grain elevator, feed mill and warehouse, which were burned on December 11.

The Price Shofner Grain Co. has been chartered at Little Rock, Ark., with a capital of \$16,000. The incorporators are James Thomas, Oscar Davis and Price Shofner.

The C. L. Trice Grain Co. of Lott, Falls County, Texas, has been incorporated with a capital stock of \$5,500. Charles L. Trice, O. R. Porterfield and A. F. Tomlinson are the incorporators.

The H. T. Hackney Co. is rebuilding its grain and feed warehouse at Knoxville, Tenn., which was burned on December 4. The new structure will be larger and more modern than the old one.

The Kirk-Miller-Josey Grain Co. has been chartered at Beaumont, Texas, with a capital of \$20,000, to deal in grain, hay, etc. The incorporators are Boone Kirk, J. E. Josey and R. C. Miller, all of Beaumont.

The Farmers' Grain, Fuel and Supply Co. has been incorporated at Granite, Okla., with a capital stock of \$10,000. The incorporators are: G. W. Briggs, W. E. Thompson, G. W. Spear, D. Bellows and D. S. Hardin.

The recently chartered Midland Mill and Elevator Co., which is composed of men interested in milling companies owning plants in El Reno, Oklahoma City and Thomas, Okla., will erect a 1,000-barrel flour mill at Tulsa, I. T., and a string of elevators along the line of the Midland Valley Railway. These elevators will have a combined ca-

capacity of 600,000 bushels and the largest, with a capacity of 200,000 bushels, will be at Tulsa. The site for the mill and elevator at Tulsa has been purchased and the contracts for the mill have been let.

The Borden & Selleck Co., St. Louis, Mo., has installed for the Argenta Elevator Co., near Little Rock, Ark., two of the latest style Howe Hopper Scales of 1,000 bushels' capacity, each equipped with the Howe Type Recording Beams.

The Mobile & Ohio Railway Co. has leased its terminal elevator at Mobile, Ala., to the grain firm of Williams & Fitzhugh of Vicksburg, Miss. The lease is for a term of years and the firm will use the elevator entirely for export business.

The J. Rosenbaum Grain Co. of Chicago has taken over the elevator at Port Chalmette (New Orleans), La., recently leased from the Frisco. The elevator has a capacity of 500,000 bushels. A new 40,000-bushel drier was recently put in.

A. B. Porter, of the milling firm of Porter & Osborn, Springfield, Tenn., will at once begin the erection of a 100,000-bushel grain elevator in that city. It will cost \$25,000 and will be operated by electrical power transmitted from the power plant of the mill, one-fourth of a mile distant.

The C. F. Caldwell Co. of Wheeling, W. Va., has been chartered to deal in hay, grain, feed, flour, fuel, building material, produce, etc. The authorized capital stock is \$1,000,000, and the incorporators are: C. F. Caldwell, James G. Stephens, A. J. Caldwell, H. C. Caldwell and A. J. Caldwell Jr.

H. K. Holman of Fayetteville, Tenn., states that he has just installed a corn plant for shelling corn and hacking shucks. He has a steam plant of about 70 horsepower at his warehouse for handling corn in the husk. The building is also equipped with a dump, corn carriers, etc. Mr. Holman handles grain, seeds, cotton, etc.

Joseph L. and L. Horth, formerly of Caseyville, Ky., have purchased the business of the E. L. Mallory Grain Co. at Paducah, Ky. The new owners will continue the business under the style of the Horth Bros. Grain Co. with Joseph L. Horth as president and manager. Horth Brothers are experienced grain men and have been in that business for some years. The E. L. Mallory Grain Co. was organized several years ago and did an extensive business. It owned three warehouses in Paducah, all connected by a spur track with the N. C. & St. L. Railway.

SOME TOTALS FOR 1904.

Below are given the figures for the total grain business done by the terminals named in 1904. In most cases, however, the figures are unofficial:

Receipts.	Shipments.
Toledo—	
Wheat, bushels	4,722,280 2,692,881
Corn, bushels	7,777,447 5,827,820
Oats, bushels	7,272,200 6,934,960
Rye, bushels	135,368 124,527
Barley, bushels	16,815 13,915
Clover seed, bags	97,384 117,262
Galveston—	
Wheat, bushels	2,682,111
Corn, bushels	3,457,421
Flour, barrels	530,222
Chicago—	
Wheat, bushels	30,648,347 18,091,231
Flour, barrels	8,850,014 7,287,039
Corn, bushels	102,354,607 75,810,313
Oats, bushels	73,389,019 47,453,293
Rye, bushels	2,379,167 1,562,476
Barley, bushels	25,410,980 5,762,869
Grass seeds, pounds	88,476,456 71,692,221
Flaxseed, pounds	3,347,232 677,781
Broom corn, pounds	18,964,967 16,224,305
Hay, tons	254,257 11,625
Boston—	
Flour barrels	1,775,458 650,681
Wheat, bushels	2,509,651 2,671,786
Corn, bushels	7,224,195 4,286,095
Oats, bushels	6,108,790 78,722
Rye, bushels	32,596
Barley, bushels	325,523 253,702
Flaxseed, bushels	3,320
Millfeed, tons	16,469 1,335
Cornmeal, barrels	39,674 27,030
Oatmeal, barrels	95,253 52,255
Oatmeal, sacks	61,881 81,266
Hay, tons	155,210 14,648
Peas, bushels	25,758 481
New York—	
Flour, barrels	3,048,000
Wheat, bushels	1,978,000
Corn, bushels	9,266,000
Oats, bushels	1,828,000
St. Louis—	
Flour, barrels	2,352,595 3,306,200
Wheat, bushels	22,778,633 24,502,367
Corn, bushels	17,852,950 16,664,353
Oats, bushels	16,806,445 12,830,815

THE EXCHANGES

The most recent sale of a Chicago Board of Trade membership is reported at \$3,150 net to the buyer.

David Horn, chief grain inspector of the Winnipeg Grain Exchange, has been appointed inspector of flour and meal for Manitoba.

The directors of the Peoria Board of Trade have increased the charge for grain sampling from 25 cents to 35 cents per car, effective January 1, 1905.

The members of the Winnipeg Grain Exchange presented Harry Swart, of that body, with a handsome silver carving set on the occasion of his recent marriage.

Detroit dealers in grain, flour and feed met recently in the Board of Trade rooms to discuss the advisability of forming an organization for mutual protection against "dead beats."

Hereafter fluctuations in No. 3 Northern and No. 4 wheat will be posted on the Winnipeg Grain Exchange, a resolution to that effect having been voted at a recent meeting of the Clearing House Association.

The New York Produce Exchange Clearing Association has been incorporated under the laws of the state of New York, with a capital of \$25,000. The directors are Yale Kneeland, F. R. Maguire, Ernest Pfarius and others.

A petition asking for the abolition of the re-inspection privilege has been circulated on the Minneapolis Chamber of Commerce. The cash grain men and elevators desire that the original grade shall prevail, but millers favor the reinspection.

January 14 was the date set for the annual dinner of the Nashville Grain Dealers' Association to be held at the Maxwell House, Nashville. Affairs in connection with the dinner have been in the hands of able committees and it was expected to eclipse the brilliant event of last year.

Members of the St. Louis Millers' Club have recommended the adoption of a set of rules by the St. Louis Merchants' Exchange to govern transactions in mill feed. This business has grown to such proportions that rules for the settlement of differences in its conduct have become necessary.

W. S. Warren, who recently handed in his resignation as a member of the directorate of the Chicago Board of Trade, did so for personal reasons, feeling that his five years of service as a director had entitled him to relief from the cares of office. As reported elsewhere, Walter Comstock was selected to fill out Mr. Warren's unexpired term.

Owing to the fact that the grain sampling and seed inspection department of the Chicago Board of Trade has earned \$4,000 above all expenses, including the cost of new furnishings for the offices of the department, the directors have reduced the charge for resampling grain from 35 cents to 30 cents per car. The new charge went into effect January 1.

Grain dealers and millers of Memphis, members of the Merchants' Exchange, recently presented R. L. McKellar of the Southern Railway with a handsome chest of solid silver. Mr. McKellar goes to Louisville to become assistant freight traffic manager of the Southern, and the gift was a token of the esteem in which he is held by his many friends in the grain trade at Memphis.

The newly formed Grain Dealers' Club of Cincinnati is now in working order. Its trade regulations became effective on December 22. This club is composed of the retail grain and hay dealers of the city, and was formed for the protection of its members against alleged abuses in the retail trade. The operation of the new plan will be watched with interest in grain circles, as not all of the retail dealers are members of the club.

The committee appointed by the Chicago Board of Trade to investigate the charges of commission cutting on Chicago-Milwaukee business has made its report. Directors Patten and Ware submitted a majority report, stating that they were unable to find that any serious evasion of the rule existed. Director Taylor, in a minority report, took a different view, and advised in favor of disciplining the members. The majority report was adopted.

The by-laws of the Winnipeg Grain Exchange have been amended as follows: "Should information, received by rumor or otherwise, cause the council to be of the opinion that any member or members of the Exchange are violating the provisions of any by-law, rule or regulation of the Exchange, the council shall have power and authority to cause the secretary to issue a tracing circular letter of enquiry to be addressed to any or all members of the Exchange, and neglect or refusal on the part of any member to answer any proper

question contained in such circular letter, within fourteen days, shall be considered as contempt of a witness before said council, and subject such member to a charge under Section 6 of By-law 5."

Twenty of the prominent grain and hay dealers of Cincinnati have petitioned Superintendent Charles B. Murray of the Chamber of Commerce, requesting that the railroads recognize the importance of getting out notices of car arrivals by noon on all business days, except Saturday, when they are wanted at 11 o'clock. Considerable inconvenience is caused by failure to receive the notices promptly. Copies of the petition have been sent to all railroads.

The rules of the St. Louis Merchants' Exchange have been amended so as to provide a penalty for default on contracts. On wheat this penalty is 5 per cent of the settling price fixed by the committee, if that price is \$1 or over, and 5 cents per bushel when the price is under \$1. On oats the penalty is 3 cents and on corn 4 cents. The vote on the amendment was 502 for to 88 against. This rule is said to be the result of defaults in short contracts last year.

The annual dues of members of the Chicago Board of Trade for 1905 have been fixed at \$50. Some of the members who were instrumental in agitating the assessment of \$25 a year for three years to create a fund to retire memberships at \$3,000 are said to be anxious to have the rule rescinded. The members have paid one assessment, but the value of memberships has held above \$3,000, and the directors have had no opportunity to use the fund at their disposal.

The annual banquet of the elevator and grain trade interests at Fort William, Ont., was held on December 15, when covers were laid for sixty at the Queen's Hotel. After the inner man had been well satisfied, J. G. King, chairman, introduced the following toast list, which was gone through with: "The King," the National Anthem; "Grain Trade," responded to by W. D. Muirhead and J. R. Jones; "The Elevator Staff," by J. Redden, T. Lemay and John McClure; "Inspection and Weighing Departments," by James O'Hagan, George Hill and R. J. Temple; "Office Staff," A. Devine, J. A. Speers and J. Moore; "The Grain Trimmers," J. Carney, Fred Fair, R. McCallum; "The Ladies," J. Campbell and T. J. Gorman; and M. O. Robinson replied to the toast of "The Man Behind the Power." The vocal part of the programme was contributed by E. Cracknell, F. Merrix, J. Quinn and Joe Lesperance.

A NEW EXCHANGE.

The Stock and Grain Exchange of Los Angeles, Cal., has been organized with a membership of fifty. The exchange is patterned after those of larger cities and will be in direct communication with them.

The membership fee is \$100 and the officers are F. C. Perrew, president, and Joseph Ball, secretary. The by-laws provide that any member found guilty of bucket-shopping shall be expelled and never be reinstated.

CINCINNATI'S NEW RULES.

The new rules for the regulation of the grain trade of the Cincinnati Chamber of Commerce were submitted and approved by the directors on December 20. They were referred back to the committee which prepared them, with instructions to classify and codify the same in proper order. After this is done they will again be submitted to the directors and approved and declared in force.

The directors also received a recommendation from the Weighing Committee that Section 6 of Rule No. 9, in relation to weighing, be amended to read that weighers holding Chamber of Commerce appointments "shall not be permitted to weigh commodities in which they are interested as buyers or sellers, nor shall they nor their deputies be employees of either buyer or seller."

The last clause of the above quotation is the proposed new feature. Owing to the fact that a big manufacturing establishment maintains such a weigher and is responsible for his acts to the Chamber of Commerce the board decided to table the recommendation until specific reasons are advanced for the amendment.

An interesting feature of the new rules is the fact that they do away with the "rejected" grade. In its place a new grade known as "No. 4" will be created, and all grain failing to classify will be known as "n. e. g.," no established grade. This change places Cincinnati on the same basis as other exchanges.

Another radical departure is the incorporation of a rule prohibiting any member of 'Change, or stranger, from going into the office of the grain inspector on the floor of 'Change. This has in the past been responsible for complaints, and the new rule is proposed as a measure for the protection of both the grain inspectors and the members of 'Change.

All rules pertaining to the old "call board" are eliminated, as the "call board" feature has long ago

been dropped. In many respects the rules have been simplified and modernized. The work was done by a special committee of the board of directors consisting of Joseph D. Morten, Walter A. Draper, Superintendent Charles B. Murray, working in conjunction with the grain trade representatives.

ELECTION AT CHICAGO.

The annual election of the Chicago Board of Trade was held on January 9 and resulted in the selection of all but two candidates on the "regular" ticket. W. S. Jackson was re-elected president and J. H. Jones was chosen as vice-president. The newly elected members of the board of directors are H. N. Sager, J. Finley Barrell, J. F. Harris, Edward Andrew and James Bradley. Mr. Andrew was the only "independent" candidate for director who succeeded in polling the necessary votes. Walter Comstock was elected director to fill an unexpired term of one year, caused by the resignation of former president W. S. Warren.

The following committees also were chosen: Committee on Appeals—J. B. Godman, Adolph Gerstenberg, L. G. Squire, W. J. Nye, R. A. Schuster. Committee of Arbitration—James R. Dalton, J. G. Walters, F. W. Scott, Julian M. McDermid and Edward P. McKenna. Mr. Schuster, elected to the committee on appeals, was the only successful independent for the committee. The total vote was heavy, 1,003 votes being cast.

THE YEAR AT NEW ORLEANS.

The annual meeting of the New Orleans Board of Trade, Ltd., was held on January 4. After an address by President J. Henry Lafaye, in which the various activities of the year were reviewed, Secretary Fred Muller presented his report. In considering the grain trade of the port, Mr. Mueller said: "The work of the grain inspection and weighing department has, since the consolidation of the New Orleans Maritime and Merchants' Exchange with our organization, been carried on very satisfactorily during the period covered by this report."

"W. L. Richeson is the chief inspector and weighmaster, and his assistants are men who have grown up in the grain business. The inspection of the grain department is recognized the world over as being of a first-class character, and our city, as a grain market, enjoys a well-deserved reputation for reliability in the grading of grain."

"We are starting into our new grain season with strong confidence that we shall see a prosperous and active period. Especially as far as corn is concerned, the business will be limited only by the ability of the transportation companies to handle this grain."

"All the roads have added additional cars to their equipment, and it is hoped that these facilities will be adequate for the business."

"This feature, particularly, should commend itself to our railroad friends after the experience they have had during the past two years."

NEW YEAR'S ON 'CHANGE.

The passing of the old year was observed as usual by the members of the different exchanges. Some of the bodies made the occasion one of hilarious good-fellowship, when dignity was thrown to the winds and all kinds of antics were indulged in. Others adopted less boisterous methods of marking the event.

The Chicago Board of Trade was one of the latter, and instead of the usual battle with sample bags, etc., a professional vaudeville entertainment for charity was given. An admission fee of \$1 was charged and 800 members and their families were present.

The Buffalo Chamber of Commerce also gave a vaudeville performance, but only home talent was in evidence. It was a select affair, none but members being admitted, but the various artists had no reason to complain of a lack of appreciation. A band, composed of members of the exchange, was one of the features, and was probably the most unique musical (?) organization that ever got together in Buffalo.

Members of the New York Produce Exchange celebrated on the floor of the Exchange. Among the attractions were the Produce Zion Band, and races of various kinds, the winners of which received prizes. Music was furnished by the Seventh Regiment Band.

At Toledo an old-time free-for-all mixup was indulged in. Corn, oats and flour, in bags and out, were used as missiles by the frolicsome brokers, and after it was all over the floor of the Produce Exchange looked as if a cyclone just there quit going. Few of the men on the floor escaped without more or less damage to their attire, but it was all taken in good part and everyone was happy.

The exchanges in Minneapolis, St. Louis, Boston, San Francisco and other cities also made December 31 a date to be remembered.

Car shortage for grain is becoming serious in the West, but has disappeared east of Chicago.

COMMISSION

The Chicago grain commission firm of Spencer & Dennison has been dissolved.

Ware & Leland of Chicago have sent out their annual calendar. It has a thermometer attachment.

J. H. Ware, of Ware & Leland, Chicago, has been elected to membership on the New York Stock Exchange.

E. W. Syer has gone with Geddes & Hatley in charge of their business on the floor of the Chicago Board of Trade.

The Union Grain Co. of Winnipeg has made application for a charter to do a general grain business, with a capital of \$50,000.

W. R. Worts, formerly of Toledo, Ohio, has associated himself with the United Grain Co. of Chicago, and will handle their Western cash business.

Walter S. Whitten has engaged in the grain commission business at Sioux City, Iowa. He will buy for a Minneapolis firm on a commission basis, it is said.

Barnard & Randall is the style of a new commission firm at 236 Rialto Building, Chicago. The members are Frank G. Barnard and Charles P. Randall, both experienced grain men.

J. J. Fones, who has had charge of the receiving business of Lasier & Hooper, Chicago, since 1900, has taken charge of the general commission department of the Northern Grain Co., Chicago.

Thomas J. Martin, a veteran broker, has transferred his membership on the Chicago Board of Trade. He will go to Milwaukee to engage in privilege trading as representative of a Chicago house.

E. R. Shaw, for fourteen years in the provision pit of the Chicago Board of Trade for Lamson Bros. & Co., has established a general grain brokerage business at Chicago under the firm name of E. R. Shaw & Co.

B. F. Franke and F. W. Krull, doing a grain commission business at Milwaukee under the style of B. W. Franke & Co., have dissolved. Mr. Krull will operate on the Milwaukee exchange as an individual broker.

Tommo Thompson, for five years manager for Finley Barrell & Co., Chicago, retired on January 1. He was succeeded by Albert Barrell, who has taken the active management of the business. Mr. Thompson is spending the winter in the South.

Richardson Bros., flour and grain brokers at 433 Bourse Building, Philadelphia, have dissolved partnership. William Richardson continues the grain business in the same office, while George Richardson will conduct a flour business at 528 Bourse Building.

John W. Scott withdrew from the Chicago commission firm of C. H. Canby & Co. on January 1 and became associated with the firm of Scott & Monohan, in which his brother, F. W. Scott, is also interested. The house has added a stock department to its grain business.

J. Herbert Dean, manager of Bartlett, Frazier & Carrington's branch office in the Auditorium Annex, Chicago, has gone to Hot Springs, Ark., to open their winter office there. C. L. Clevenberg, who is manager of the firm's private wire system, will be in charge of the Annex office.

Burns Bros. of Buffalo, N. Y., have established a flour and feed department in addition to their grain business. They have secured the services of Mr. G. A. Underwood, whose long experience in this line in both Eastern and Western markets should make this department valuable to the trade as well as to the house.

It is reported that the grain firm of Early & Daniel, Cincinnati, is being organized into a stock company to be known as the Early & Daniel Co. There will be \$250,000 in common stock and \$150,000 in preferred. H. Lee Early will be president; L. B. Daniel, secretary and treasurer, and August Ferger, vice-president.

William T. Kemper, president of the William T. Kemper Elevator Co. of Kansas City, Mo., has announced his intention to retire from the grain business and devote all his time to the management of the Kemper-Paxton Mercantile Co. of Kansas City. He states that it may take him six months to close his grain business.

H. Hemmelgarn & Co., commission merchants in grain, seeds and provisions on the Chicago Board of Trade, sent out a very handsome holiday remembrance to their friends and customers, consisting of a calendar surmounted with a copy of a well-known masterpiece. There were four pictures used. One was called the "Historian," an Indian scene; the subject of one was "Jim," a reproduction of one of Brown's paintings; the third was called

"Chums," and the fourth was a copy of an animal painting by Craig, the subject being "A Corner in the Barn."

Rumsey & Co. of Chicago have filed articles of incorporation, with a capital stock of \$50,000. I. P. Rumsey, F. M. Bunch and H. A. Rumsey are the incorporators.

The Way-Johnson-Lee Co. of Minneapolis has been succeeded by the Loomis-Johnson-Lee Co. and the capital stock has been increased to \$100,000. The change was brought about by the retirement of Thomas A. Way of Mason City, Iowa, who sold his holdings in the company to L. N. Loomis of Minneapolis. Mr. Loomis formerly owned and operated a line of country elevators in the Northwest, and is well known in the grain trade. Phillip S. Reed will remain as secretary of the company.

Hill, Moran & Hammond have succeeded to the business of James H. Wells at 184 Jackson Boulevard, Chicago. Mr. Hill has been a member of the Chicago Board of Trade about twenty years. Mr. R. H. Moran was with A. Geddes & Co. until the firm went out of business, and Mr. Hammond is also a well-known grain man. D. J. McLoraine, who manages the business, was formerly with Finley, Barrell & Co. and recently with Knight, Donnelly & Co., and is well acquainted in the Chicago trade.

"Fair Women" is the suggestive and alluring title of the calendar that Sneath & Cunningham of Tiffin, Ohio, have sent to their friends in the trade. The title is not a misnomer, for the women depicted in the three 11½x15-inch panels are certainly fair. Those who admire feminine loveliness will appreciate this calendar. This is the fifth year that Sneath & Cunningham have issued calendars, and each year has marked an improvement in the souvenirs. The one for 1905 sets a standard that even this enterprising firm will find hard to beat.

Frank J. Amsden, a grain and stock broker of Rochester, N. Y., on December 27 filed a petition in bankruptcy. The liabilities are reported at \$54,330.30 and the assets at \$5,652.68. About seven years ago the failure of William F. Daniel of New York City, who was at that time Mr. Amsden's New York broker, caused a heavy loss to Mr. Amsden, and two years later this was followed by the failure of C. W. Morgan of New York, at that time Mr. Amsden's New York representative, which caused Mr. Amsden still heavier loss. Since these losses he has been endeavoring to pay his creditors out of his earnings, but the load proved too heavy.

FLAXSEED

Recent advices from Toledo, Ohio, state that considerable flaxseed has been received at that port this season. On December 13 about 90,000 bushels was unloaded at the elevators of the National Milling Co. at Birmingham, where the seed is being stored for the winter. Some time ago the George L. Craig brought in 190,000 bushels for storage. Of this there were 40,000 bushels unloaded into the big tanks of the National, while 150,000 bushels will remain in storage in the hold of the vessel over the winter or until the linseed plants of the city need the product.

Concerning the flaxseed situation, a recent issue of the Duluth Commercial Record has the following: "During the past year there has been more or less talk about control of flaxseed supplies, but there has been no control. It is true that the concentrated holdings have been large, and it is probably a fact that the intention at the beginning of the crop year of 1903 was to obtain control. But there never was a time during the entire year of 1903 when ownership of seed supplies and oil was not sufficiently scattered to bring about offerings of the former on an advance and to deter oil buyers from coming in. It is more than likely that the big company discovered this to their cost during July and August of the past year. It is figured in some quarters that existing contracts for oil are fairly large, but we doubt if they are as large as in 1903 at this time and probably not much if any larger than during the summer months; this is due partly to the difficulty in buying futures and partly to the fact that a majority of the trade considered them too high. But the era of low-priced oil seems to have gone."

Agricultural bureau makes no January report. That is, it says nothing about grain in the January report. It talks about farm animals. It might give the crops of bulls and bears on the different boards. It would find a short crop of both. March report will be the next interesting one. That will give the farm reserves, and as prices are entirely upon a domestic basis, it will be very important.—C. A. King & Co.

IN THE COURTS

The Barnett & Record Co. of Minneapolis have placed a mechanic's lien on the Harroun Bros.' Gulf Elevator, Kansas City, to protect a balance due of \$26,549, on a contract now in course of settlement.

The action of the Farmers' Elevator Co. of Virginia, Kan., against the Missouri Pacific Railroad Co., has been settled and dismissed, the Railroad Company agreeing to build the switch in controversy.

Suits for \$2,300, debt, have been begun by Nathan Killior against Burton J. Millis, a grain merchant at Worthington, Ind. Millis has disappeared and his whereabouts are unknown, leaving personal debts of about \$3,000.

L. F. Miller & Sons, grain commission merchants of Philadelphia, on December 19 brought suit against the Columbus Grain Elevator Company at Columbus, O., for \$382.26, alleged to be due as overpayments on carload lots of corn, oats and other grains.

Charles E. Erby, trustee of the H. B. Smith Estate, Chicago, has begun suit to prevent the use of \$8,000 worth of insurance policies, given by Smith to secure notes given by him to Board of Trade firms to whom he was indebted. The trustee pleads that the debts were gambling ones.

Suit has been ordered begun against T. H. Kellett, a member of the Winnipeg Grain Exchange. Warehouse Commissioner Castle, who is forcing the action under the grain act, claims that Kellett has been trading as a commission merchant without license or bond, and, therefore, unlawfully.

The case of Hoyt Grain Co. of Minneapolis against Kemper Grain Co. of Kansas City was arbitrated at Kansas City, the committee giving the defendant company judgment for \$897 as expenses. The Hoyt claim was that a purchase of 50,000 bushels of No. 2 Hard Wheat was not up to grade.

Frank Connors, administrator of the estate of his brother, William Connors, a scooper, who was killed in the hold of a steamer unloading grain at the Great Northern Elevator, Buffalo, has secured a judgment in the Court of Appeals, the amount of which will be determined by evidence to show the actual loss to the estate by William Connors' death.

Gustavus Meyer, a creditor of Claude Meeker, broker, who recently assigned, filed a motion at Columbus on December 27 that Meeker be compelled to disclose to the court his relations with the O'Dell Stock and Grain Company of Cincinnati. Meyer says in his motion that he has reason to believe that they were associated in the brokerage business, and that all of the assets of the partnership have not been disclosed.

In the action of McCarthy Bros. Commission Co. of Duluth against the Neilsville Elevator Co. a verdict for \$146 for the plaintiff was entered. The court held that all options dealings are illegal, and therefore the Elevator Company was not liable for debts so created. The McCarthy Company had sued for \$4,200. The Neilsville Company is a co-operative concern, and its attorney insisted in his argument that the McCarthy Company, as experienced commission men, knew that an elevator company the size of the defendant company could not possibly deliver the enormous amount of wheat they sold upon options, and therefore that these deals were gambling, pure and simple; and the court so held.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

W. B. Hoover, Paris, Ill.
S. Watts, Des Plaines, Ill.
J. B. Soule, Detroit, Mich.
C. W. Frederick, Dyer, Ind.
G. M. Gwynn, Essex, Iowa.
J. Shambolts, Albion, Mich.
F. A. McKenzie, Quincy, Mich.
Robt. Dewar, Minneapolis, Minn.
L. D. Van Stone, East St. Louis, Ill.
W. H. Brown, manager South St. Paul Grain Co., South St. Paul, Minn.
C. G. Hammond, president Huntley Mfg. Co., Silver Creek, N. Y.

The Indiana Corn Growers' Association held its annual meeting in the State House at Indianapolis on January 4. Members from all sections of the state were present.

HAY AND STRAW

Good hay is reported scarce at Baltimore. Stocks and receipts both are light.

A large amount of hay has been shipped from Humboldt, Iowa, this season.

The Chicago grain commission firm of John West & Co. will add a hay department.

At Sherack, Minn., where a good crop of hay was harvested, baling is now in progress.

The B. & O. Railway has raised the embargo on hay and straw shipments for Baltimore.

A large acreage of alfalfa will be put in by the farmers around Waco, Texas, this year.

The Baltimore & Ohio Railway has completed its new hay shed at Mount Clare (Baltimore), Md.

A report from Grand Marais, Mich., states that hay offerings there are plentiful, but that straw is scarce.

The Kansas City Journal states that the last hay crop in many Missouri counties is the heaviest by far ever grown.

On January 1, G. A. Underwood assumed charge of the new hay and feed department of Burns Bros., grain dealers at Buffalo, N. Y.

A large hay barn at Lerna, Ill., owned by F. Voris, was burned recently. It contained only a small amount of hay at the time of the fire.

A new alfalfa warehouse, 61x100 feet, is being erected at La Junta, Colo., by the Woolsey & Stahl Hay Co. of Kansas City, Mo. It will have a capacity of 1,000 tons of hay.

The 1904 hay crop in the vicinity of Perrysburg, N. Y., was more than an average crop, both as to quantity and quality. Good prices for timothy are being secured by the farmers.

The largest car of hay ever received at Pittsburg was handled by the firm of Geidel & Co. on December 27. The car contained 405 bales, 48,765 pounds of fancy No. 1 timothy.

The wholesale hay and grain firm of Hosmer, Robinson & Co. of Boston, Mass., has brought an action against a Minneapolis firm for an alleged shortage on hay shipments, valued at \$800.

W. A. Maharry has succeeded James McCarty as a member of the firm of McCarty & McClelland, hay, straw and feed dealers at Zanesville, Ohio. The business will be continued under the style of Maharry & McClelland.

Recent San Francisco advices state that a secret order for several thousand tons of hay for export shipment has been placed with one of the leading firms of that city. Circumstances are said to point to the Russian government as the purchaser.

The total receipts of hay on the Baltimore market for 1904, exclusive of the loose product brought in by farmers, were 59,865 tons. The shipments for the same period were 18,383 tons. Receipts for 1903 were 65,831 tons and shipments 21,070 tons.

Hay receipts for 1904 on the Chicago market were 252,370 tons and shipments 11,660 tons. This is an increase in receipts over 1903, the amount received that year being 235,747 tons. A falling off in shipments occurred, however, the 1903 shipments being 20,012 tons.

According to the recent report issued by the Department of Agriculture, the hay crop of Connecticut for 1904 was the most valuable product of the farms of that state. There were 484,751 acres harvested, which produced 513,836 tons, with a value of \$7,651,018.

The grades of hay and straw of the National Hay Association have been adopted by the following Exchanges: Buffalo, Baltimore, Brooklyn, Cleveland, Columbus, Chicago, Cincinnati, Indianapolis, Kansas City, Nashville, Jacksonville, Minneapolis, Louisville, New Orleans, Philadelphia, Pittsburg, Richmond, St. Louis, Washington, Toledo, St. Paul, Norfolk, Duluth and Memphis.

Articles of association of the Young Bros.' Hay Co. of Lansing, Mich., have been filed with the secretary of state. The incorporators are: F. L. S. G., Samuel, Harriet B. and Eva F. Young, John Daley and Frank Worden. The company is capitalized at \$15,000 and will deal in hay, straw and grain. It has warehouses at Mason, St. Johns, Grand Ledge, Charlotte and Lansing, Mich.

Dusenbery & Co. is the style of the firm succeeding to the business of H. Dusenbery & Co., hay dealers of New York City. The change was made owing to the death of the late Henry Dusenbery, who was the head of the old firm. J. Warren Dusenbery, a brother and partner of the deceased, is the senior member of the new firm. He was vice-president of the N. H. A. in 1900 and is at present a member of the Terminal Facilities Committee of the Association. The other members of

the new firm are F. D. Dusenbery, who has been connected with the business for a number of years, and Adam S. Stiger.

The hay market at Walla Walla, Wash., is said to be practically at a standstill. Freight rates have been rather unsatisfactory, consequently a smaller amount than is generally exported has been disposed of. Shippers hope to obtain better rates and shipments will increase before spring.

The New York Hay Exchange, which was organized about thirty years ago, has been revived, and the following officers were recently elected: President, Charles J. Austen; vice-president, W. J. Overocker; second vice-president, Charles Ladue; secretary, Edwin D. Miner, and treasurer, George Van Voist. The Exchange is composed mainly of hay men of Greater New York. Important matters relative to transportation, lighterage, etc., were largely responsible for the renewal of interest in the organization.

T. D. Randall & Co., Chicago, in their market report of January 11, say: Total arrivals of hay and straw to-day only 16 cars, and market continues very firm. Timothy Hay in exceedingly light supply, choice selling readily from \$13.00@13.50; No. 1, \$11.50@12.50; No. 2 and No. 1 Clover, mixed, \$10.00@11.00; the lower grades, \$8.00@9.50; Rye Straw firm at \$8.50@9.00; Oat and Wheat Straw, \$6.00@6.50; Kansas and Indian Territory Prairie Hay is also in very light supply, choice selling readily at \$11.50; No. 1, \$10.50@11.00; choice Iowa, Minnesota and Nebraska Prairie Hay moving readily at \$9.50@10.00; No. 1, \$8.00@9.00, the lower grades \$7.00@8.00; Illinois, Indiana and Wisconsin feeding Prairie Hay, \$6.50@7.00; packing hay, \$6.00. Advices continue exceedingly light, and we cannot urge you too strongly to take advantage of present market. The receipts for the past fifteen days have not been equal to daily consumption. All the surplus that has been in the outer yards has been cleaned up. Unless receipts increase we expect to see higher prices.

H. H. Freeman & Co., Chicago, report January 11: Timothy—Stocks of hay are the lowest we have seen them since last spring. Fresh arrivals are practically nothing. Railroads are all cleaned up except the C. & N. W., which still has a few cars out. The amount they have is very small and in a few days it, too, will be wiped off. Higher prices are inevitable, for dealers and consumers are in need of supplies, and with so little arriving, market cannot be held down. Not one-fourth enough for our daily consumption came in to-day, and as there is no hay stored and none in transit you cannot err by shipping. Shipments made quickly will meet with fully as high a market as is likely to prevail in the spring, during seeding time. Do not delay, but ship at once. Prairie—Market firm and active. Very little of any kind of grade is coming in. Demand is much improved. All grades, even the common lots, included in the advanced price obtainable. Buyers are anxious for supplies and every sound grade or kind is working off in a very satisfactory manner. Shippers from the Southwest should avail themselves of the excellent condition which is at hand. More favorable prices than now prevail could scarcely be hoped for when the extent of the crop is considered. Straw—Quite a proportion of the receipts continue of straw, and dealers are fairly well stocked up. Rye is firmest, with wheat and oats quiet. We think bottom has been reached, however, for present small receipts are bullish.

REVIEW OF THE CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending December 17, quotations at the close ranged as follows: Choice Timothy, \$12.00@12.50; No. 1 Timothy, \$10.50@11.50; No. 2 Timothy, \$9.50@10.00; No. 3 Timothy, \$8.00@9.00; Choice Prairie, \$9.50@10.50; No. 1 Prairie, \$9.00@10.00; No. 2 Prairie, \$7.50@8.50; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$5.50@6.00. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.00 for fair to choice Timothy, \$5.50@7.00 for State, and \$7.00@10.00 for Iowa and Kansas Prairie Hay. Rye Straw sold at \$9.00@9.50, Wheat Straw at \$7.00@7.50, and Oat Straw at \$7.50. The receipts for the week were 6,880 tons, against 6,572 tons for the previous week. Shipments for the week were 158 tons, against 62 tons for the previous week. The market for Timothy hay ruled steady. Prairie Hay was quiet and dull.

During the week ending December 23, quotations at the close ranged as follows: Choice Timothy, \$11.00@11.50; No. 1 Timothy, \$10.50@11.00; No. 2 Timothy, \$9.00@9.50; No. 3 Timothy, \$8.00@9.00; Choice Prairie, \$9.50@10.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$7.50@8.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@12.00 for fair to choice Timothy, with very fancy

\$13.00, \$5.50 for State, and \$6.50@10.00 for Dakota, Iowa and Kansas Prairie Hay. Rye Straw sold at \$9.00@9.50, and Oat Straw at \$6.50@7.00. The receipts for the week were 4,670 tons, against 6,880 tons for the previous week. Shipments for the week were 129 tons, against 158 tons for the previous week. A dull and dragging market was experienced throughout the week for both Timothy and Prairie Hay.

During the week ending January 7, quotations at the close ranged as follows: Choice Timothy, \$11.50@12.50; No. 1 Timothy, \$10.50@11.00; No. 2 Timothy, \$9.00@9.50; No. 3 Timothy, \$8.00@9.00; Choice Prairie, \$10.50@11.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$7.50@8.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$7.50@13.00 for poor to fancy Timothy, \$6.00@9.00 for good to fancy State, and \$7.00@10.00 for Iowa and Kansas Prairie Hay. Rye Straw sold at \$8.25@9.00, and Oat Straw at \$6.00@7.00. The receipts for the week were 2,582 tons, against 5,426 tons for the previous week. Shipments for the week were 113 tons, against 176 tons for the previous week. All descriptions of both Timothy and Prairie Hay met with a good demand during the week. The arrivals were quite small and all consignments sold readily. Prices advanced 50 cents per ton, the market closing strong.

CROP REPORTS

Rains in Texas have benefited grain crops, which were beginning to suffer for lack of moisture.

The estimated wheat yield in South Australia this season is 14,575,000 bushels, an increase of 1,360,000 bushels as compared with the preceding one.

In South Dakota weather during the past month has been favorable for husking and cribbing corn. The limited acreage of winter wheat is in good condition.

Director J. R. Sage of the Iowa Crop Service Bureau has completed estimates of the 1904 crop, showing yields that aggregate approximately \$35,000,000 in value.

Fall wheat in Kansas went into the winter months in a worse condition than for many years. Lack of moisture is the cause. The injury to date is claimed to amount to 30 per cent.

Corn in Illinois is practically all cribbed and much of it has been marketed, according to the state weather bureau. Rye and fall-sown grasses and clover have not made satisfactory growth.

Wheat in portions of Indiana has been damaged by the heavy freeze which followed recent rains. In Wayne County it is said that the coming season's production will be less than for 25 years.

"Our corn here is of very good quality, average yield about 30 bushels, but farmers are in easy circumstances, so are not selling. Receipts are very small."—E. C. NORTHWAY, Bennett, Neb.

The government estimates the wheat crop of the three Northwestern states at 153,793,000 bushels. Howard of Chicago and Thornton of Minneapolis were both pretty close, the former's estimate being 151,100,000 bushels and the latter's 156,150,000 bushels.

The final figures on the 1904 crop of Manitoba, according to the provincial department of agriculture, are: Wheat, 39,162,458 bushels; oats, 36,280,979 bushels, and barley, 11,177,970 bushels. To December 1, 62½ per cent of the wheat had been marketed.

The Michigan state report, as summarized by C. A. King & Co. of Toledo, is as follows: "It says 262 reports show that wheat suffered during December, while 349 reported that it had not. Year ago 97 per cent reported wheat was protected during December and was uninjured."

The Ohio January report makes the condition of winter wheat 72; winter barley, 72; rye, 76. Corn was late in maturing, and some was put into crib not in prime condition, so that the general condition of corn in the crib is low. The condition of corn in the shock is fairly good, and the amount remaining unhusked is comparatively small.

Thornton of the Duluth Commercial Record says: "Duluth and Minneapolis country mills and country elevators have taken to January 1 101,000,000 bushels of wheat from Northwestern farmers, compared with 106,000,000 to the same date on the 1903 crop. Between January 1, 1904, and August 1, 1904, Duluth and Minneapolis and country mills used 77,000,000 bushels of wheat and had in store on August 1 4,000,000 bushels, a total of 81,000,000 bushels. On the basis of my crop estimates, which are confirmed by the government, the total sup-

OFFICIAL CROP FIGURES ON WHEAT, CORN AND OATS FOR 1904.

Washington, D. C., December 29.—The final returns to the Chief of the Bureau of Statistics of the Department of Agriculture from regular and special correspondents, supplemented by reports of special field agents, show the acreage, production and value of the principal farm crops of the United States in 1903 and 1904 in detail as follows:

Crops.	Acres.		Production, Bushels.		Farm Value.	
	1904.	1903.	1904.	1903.	Dec. 1, 1904.	Dec. 1, 1903.
Corn.....	92,231,581	88,091,993	2,467,480,934	2,214,176,925	\$1,087,461,440	\$952,868,801
Winter wheat.....	28,865,855	32,510,510	332,935,346	390,867,250	325,611,373	.....
Spring wheat.....	17,209,020	16,954,457	219,464,171	237,954,585	184,878,501	156,781,977
Oats.....	27,842,669	27,638,136	894,595,552	784,094,199	279,900,013	267,601,661
Barley.....	5,145,878	4,968,137	139,748,058	131,861,391	58,661,807	60,169,313
Rye.....	1,732,673	1,906,884	27,324,565	29,363,916	18,745,543	15,993,871
Black wheat.....	2,023,673	800,303	15,008,336	14,263,916	9,330,768	6,650,733
Flaxseed.....	2,233,565	3,233,299	23,400,534	27,343,644	23,228,758	22,291,557
Rice.....	662,006	.....	21,036,038	.....	13,891,533	.....
Potatoes.....	3,015,675	2,916,855	332,830,300	247,157,800	150,673,392	151,638,094
Hay.....	39,998,602	39,933,759	660,696,028	61,305,940	529,107,625	556,376,880
Tobacco.....	806,409	1,037,735	6660,460,739	815,972,425	53,382,959	55,514,627

a Tons. b Pounds.

STATES.	Winter Wheat.		Spring Wheat.		Corn.		Oats.	
	1904.	1903.	1904.	1903.	1904.	1903.	1904.	1903.
Maine.....	.....	.....	179,992	207,300	510,979	441,705	4,170,826	4,738,222
New Hampshire.....	.....	.....	.....	.....	753,398	610,025	404,177	374,848
Vermont.....	.....	.....	40,311	35,697	2,133,129	1,404,632	3,303,889	3,030,635
Massachusetts.....	.....	.....	.....	.....	1,596,780	1,075,272	225,658	216,891
Rhode Island.....	.....	.....	.....	.....	337,999	301,361	40,742	47,433
Connecticut.....	.....	.....	.....	.....	2,120,244	1,233,254	337,514	320,830
New York.....	5,362,064	9,693,894	.....	.....	17,079,390	15,485,525	42,490,143	44,584,812
New Jersey.....	1,392,151	1,588,384	.....	.....	10,449,962	6,534,634	2,052,148	1,620,037
Pennsylvania.....	21,857,351	26,038,444	.....	.....	48,335,748	45,477,636	39,746,818	34,582,365
Delaware.....	1,676,801	1,167,788	.....	.....	5,688,326	5,924,732	132,416	107,701
Maryland.....	10,237,143	10,120,788	.....	.....	21,213,876	17,871,260	1,058,983	789,804
Virginia.....	7,257,065	6,999,646	.....	.....	42,899,913	39,740,702	3,878,412	2,850,100
North Carolina.....	4,912,561	3,228,606	.....	.....	40,705,478	38,594,585	3,252,809	2,470,492
South Carolina.....	2,267,401	1,756,696	.....	.....	22,189,837	18,614,037	3,271,846	2,849,686
Georgia.....	2,564,058	1,859,740	.....	.....	47,334,713	46,078,391	3,486,969	3,482,865
Florida.....	.....	.....	.....	.....	6,640,334	6,083,035	420,050	438,596
Alabama.....	1,060,138	1,020,410	.....	.....	41,878,165	41,736,163	2,917,026	3,304,779
Mississippi.....	25,599	28,552	.....	.....	39,709,064	39,818,273	1,949,645	1,655,610
Louisiana.....	.....	.....	.....	.....	27,258,443	27,937,905	579,490	510,678
Texas.....	12,483,562	19,890,173	.....	.....	136,702,699	140,750,733	28,688,820	32,475,613
Arkansas.....	2,198,507	1,992,578	.....	.....	48,332,614	48,212,663	4,795,965	4,225,511
Tennessee.....	9,298,417	7,693,070	.....	.....	80,890,025	75,285,778	3,268,937	3,132,512
West Virginia.....	3,158,846	4,128,807	.....	.....	19,176,413	16,894,037	2,250,998	1,839,249
Kentucky.....	7,349,329	7,728,235	.....	.....	86,815,580	82,545,546	5,485,272	4,640,326
Ohio.....	17,563,478	28,303,515	.....	.....	99,028,555	88,095,757	49,733,541	30,752,419
Michigan.....	6,874,065	15,524,892	.....	.....	36,990,468	44,212,226	38,175,065	29,092,968
Indiana.....	12,535,363	23,994,030	.....	.....	143,396,852	142,590,000	42,358,733	39,457,705
Illinois.....	21,542,421	16,571,940	.....	.....	344,133,680	264,987,431	117,341,952	98,525,762
Wisconsin.....	2,045,111	2,469,782	.....	.....	45,119,913	43,639,449	86,734,515	79,688,846
Minnesota.....	.....	.....	68,334,256	70,652,597	41,809,083	40,726,870	85,178,603	68,800,174
Iowa.....	872,726	1,274,480	10,393,494	11,256,824	303,093,266	229,218,320	122,323,200	84,133,944
Missouri.....	27,163,141	22,194,614	.....	.....	151,322,643	202,839,584	16,265,549	17,401,783
Kansas.....	61,372,338	83,316,044	.....	.....	134,609,666	171,087,014	16,955,087	26,011,753
Nebraska.....	27,077,674	35,809,302	.....	.....	260,944,335	172,379,532	57,908,489	59,426,652
North Dakota.....	.....	.....	31,566,784	47,252,994	43,555,052	41,618,067	27,825,252	27,267,184
Montana.....	.....	.....	53,892,103	55,240,580	1,914,530	2,167,402	31,010,360	21,845,036
Wyoming.....	.....	.....	2,596,731	2,784,327	86,624	91,291	6,301,704	7,532,437
Colorado.....	.....	.....	520,985	473,740	72,805	45,784	1,261,967	1,116,846
New Mexico.....	.....	.....	5,917,649	7,423,581	2,415,658	2,222,075	4,834,330	4,593,469
Arizona.....	.....	.....	440,678	822,701	778,179	956,688	194,569	345,147
Utah.....	.....	.....	356,082	483,964	144,966	194,925	30,070	64,468
Nevada.....	.....	.....	4,783,825	4,156,072	380,738	238,268	1,690,722	1,653,288
Idaho.....	.....	.....	663,415	591,358	.....	.....	231,879	177,463
Washington.....	3,454,080	3,682,938	.....	.....	.....	.....	3,646,174	1,966,940
Oregon.....	14,632,773	7,517,179	.....	.....	212,430	229,032	7,407,198	7,598,185
California.....	8,609,134	6,957,581	.....	.....	495,706	448,559	6,150,550	9,720,677
Alaska.....	17,474,864	20,926,192	.....	.....	1,556,269	1,777,162	5,697,564	5,756,964
Oklahoma.....	15,040,666	24,482,637	.....	.....	48,611,679	34,748,199	6,002,080	8,124,230
Indian Territory.....	3,474,776	2,996,292	.....	.....	54,625,007	42,072,976	6,980,380	6,439,080
Totals.....	332,935,346	399,867,250	219,464,171	237,954,585	2,467,480,934	2,214,176,925	894,595,552	784,094,109

ply in sight for the coming seven months cannot exceed 68,000,000 bushels, a shortage of 13,000,000 bushels. I think the demand for wheat for shipment out of Duluth and Minneapolis will exceed that of the same seven months in 1904, and it therefore becomes a question of farm demand on North-western mills. It seems as though they must curtail their output as compared with 1904 to the extent of at least 13,000,000 bushels."

Pit and Post, published by Knight, Donnelley & Co., Chicago, contains an article by B. W. Snow, in which he makes an estimate of farm reserves January 1, for the last four years, the figures for this year based on local estimates furnished by country correspondents, and the figures for the previous years, a modification of the annual statement of March 1. His figures follow: Farm stocks January 1, 1905, 195,000,000 bushels; 1904, 228,000,000 bushels; 1903, 273,000,000 bushels; 1902, 244,000,000 bushels. Continuing, the writer estimates the probable supplies at the end of the year as follows: Farm stocks January 1, 1905, 195,000,000 bushels; commercial stocks January 1, 1905, 73,000,000 bushels; total, 268,000,000 bushels. Subtracting the consumption January 1 to June 30, 1905, or 192,000,000 bushels, and seed, spring wheat, 30,000,000 bushels; leaves for exports six months, and stocks in all positions June 30, 1905, 46,000,000 bushels. Last year for the same period, though exports were light, they totaled 40,000,000, and the stock remaining in all positions on June 30 was 64,000,000, indicating that at this time a year ago we had 104,000,000 bushels available for these two purposes, where we now have only 46,000,000 bushels. Of winter wheat the writer says: "The condition of the crop when winter closed in was low, averaging only 83 per cent, or nearly 10 points below the average for a series of years at this date. Droughty conditions have prevailed over practically the whole belt from time of seeding until winter began, and the result is a small plant, lacking in vigor, and not in position to resist any unfavorable winter conditions.

Should even moderately unfavorable weather conditions be experienced during the rest of the winter, the spring might easily develop a sensational situation."

The monthly crop report of the weather bureau at Washington, dated January 4, says: "The severe and protracted drought prevailing in October and November continued during the greater part of December in the Ohio Valley, but was generally relieved by rain and snow during the last week. The greater part of the winter wheat belt was protected by snow covering most of the month, but was exposed during the cold period of the 27th to 29th. The unfavorable effects of drought noted at the close of the previous month are now less marked, a very general improvement being indicated, especially in portions of the Ohio Valley. A decided improvement in the condition of winter wheat is generally reported throughout the middle Atlantic states. In central and northern California the condition of winter wheat is excellent, and while the wheat regions of Oregon and Washington have suffered from lack of moisture, the outlook for wheat in portions of these is encouraging."

As far back as November 12, 1904, I served out to you a cereal punch, and told you then that it took its name from the regular old whisky punch. The strongest ingredient in it was crop shortage, but that was so disguised that it wasn't then noticed, just as the whisky, the strongest ingredient, is disguised in the other. But I told you it was there just the same and in the end it would assert itself. Component parts answering to the lemon, the sugar, the bitters, the cordial, the slice of orange and pineapple and maraschino cherry were contributed to hide the active principle. The disguises have at last all dropped away, and now the shortage is the one thing that we can taste and recognize. It is becoming every day more pungent.—E. W. Wagner, January 7,

RULES GOVERNING THE INSTALLATION OF GRAIN DRIERS.

As the use of grain driers in connection with elevators is becoming more general on account of the increasing demand for artificially dried grain for shipment, and as the machinery for drying grain has been perfected to such an extent that it is both effective and profitable to the user, the adoption of definite and uniform rules regarding their use is deemed necessary by the insurance companies in order to obtain the greatest degree of safety in the arrangement and application of drying plants of this character. These rules, as approved by the underwriters, are as follows, and are taken from advance sheets of the forthcoming catalogue of the Hess Warming & Ventilating Co., builders of the "Hess Drier."

Several kinds of driers are now on the market, varying in detail, but all involving the use of certain features which may be enumerated as follows:

- 1st. A receptacle containing the grain while drying and which is traversed by air passages.
- 2d. A system of steam coils or radiators to heat the air used for drying.
- 3d. A blower or fan to force the air over the steam pipes, thence through the grain.
- 4th. An air trunk or chamber confining the heated air after it leaves the coils and to direct and distribute it through the grain.
- 5th. An exhaust space or conduit, receiving the moisture-laden air from the grain and conducting it to the outer air.
- 6th. Spouts or carriers of grain from the elevator to the drier and from the drier to the elevating buckets of the elevator.
- 7th. Some form of enclosure containing the apparatus which may be independent of or form part of the apparatus.
- 8th. Some form of power for operating the apparatus which may or may not be independent from the elevator.

HAZARDS.

The several elements of fire hazard attending the use of grain driers are as follows:

- 1st. The use of blowers, increasing the danger of fire in a greater or less degree, according to the speed at which they are driven.
- Note. The form of air passage and the thickness of the grain layers determine the air pressures necessary to accomplish the desired results. The higher air pressures are accompanied by the higher speeds, increasing the probability of hot bearings with their attendant dangers.

Small air passages to the grain may produce high velocity of the hot air at these points, concentrating it in a jet upon any substance in its path and increasing the carbonizing effect.

- 2d. The presence of a forced air draught causing the circulation and accumulation of dirt and grain dust and increasing the danger of possible dust explosion.

Note. The closed construction of most all driers renders it difficult to extinguish a fire and in case of explosion this construction insures the maximum of the destructive force.

The rapid spread of fan-driven fires, particularly in vertical shafts, makes it almost impossible to successfully contend with them.

- 3d. The use of steam coils, usually under pressure of live steam.

Note. The accumulation of dirt and the careless disposition of oily waste in the enclosure containing the coils have been the cause of fires in apparatus of this nature in the past.

- 4th. The drying out and preparation of the surrounding woodwork for the rapid spread of fire, if the apparatus is inside of the building.

Note. The constant movement of the building due to the loading and unloading renders it almost impossible to keep the apparatus tight and in perfect order if placed inside the building.

- 5th. The use of a system of lighting, in the drier, for the use of the operator.

6th. The hazard attending the use of a steam engine or the motive power necessary to operate the apparatus.

DESIRABLE FEATURES.

The following features in the design and construction of grain driers are desirable and tend to reduce the danger of fire to a minimum.

- 1st. The drier should be accessible and as open in construction as possible so as to afford access for the attendant and so that all portions may be reached by fire streams.

2d. The layers of grain through which the hot air is forced should be as thin as practicable so as to permit the use of air under low pressure and therefore a comparatively slow speed at the fan.

The area of grain through which the air passes should be as large as possible for the same reason.

Note. Cases are on record where temporary wood parts of a grain drier have been charred in one day by concentrated air jets of comparatively high velocity and where the temperatures at the fan

were less than 200 degrees Fahrenheit. It would appear from this that small air passages so arranged that the velocity of air is materially increased would have a tendency to overheat the grain and increase the fire hazard.

3d. The drier should be self-cleaning and free from all parts liable to fill with dust and dirt.

Wire netting is more or less objectionable on account of its liability to clog with dust and chaff.

4th. The air spaces should communicate freely with the outer air by windows and ventilator openings so as to afford vent in case of explosion. Ample windows will also reduce the necessity of artificial light and render the apparatus more accessible for outside hose streams.

5th. Provision should be made for quickly withdrawing the grain from the apparatus in case of fire. A spout for draining the grain into the lower or ground floor where fire can be more easily extinguished would answer this purpose, providing it is independent of the spout for reconveying the grain into the elevator.

A receiving hopper below the drier and into which burning grain can be drawn and fire smothered will also answer this purpose.

6th. The division of the drier into separate compartments is advisable where the separation can be so arranged as to confine a fire or prevent its rapid spread to all portions.

RULES AND REGULATIONS.

The hazards incident to the use of grain driers cannot be eliminated or safeguarded to such an extent that their introduction inside the elevator would not cause a material increase in the fire hazard. Rules and regulations can be made, however, which will permit the introduction of this hazard in close proximity to the elevator in connection with which the drier is used.

The following rules and regulations for the safe installation of grain driers have been adopted by this bureau. The rules apply to both portable and stationary driers:

THE BUILDING.

1st. The shaft or enclosure containing the apparatus to be constructed entirely of brick and non-combustible material and located at least six feet away from the elevator.

Note. The distance of six feet between the elevator and the drier building is sufficient for the elevating machinery, but a greater distance is advised in all cases where the yard room will permit. Enclosures containing driers of doubtful safety and not fulfilling the requirements of this standard must also be located at a greater distance from the elevator.

Note 2. A brick structure is considered the best method of enclosing apparatus of this kind. The building could be more cheaply constructed of sheet iron on a steel framework, but this rusts badly from the condensation of moisture given off by the grain and is not proof against a hot fire. Sheet metal construction would necessitate the removal of the structure to a much greater distance from the elevator.

2d. The roof should be of tile on steel supports so constructed as to afford vent in case of explosion.

3d. The openings in the side walls of the structure above the first floor to open away from the elevator. This is not meant to include the necessary openings for shaft, rope drive or spouts.

4th. The spouts between the elevator and the drier building to be of metal, on metal supports and provided with tight self-closing dampers so arranged as to remain closed except when the grain is passing through them.

5th. The windows to be protected by wire netting.

6th. The structure not to be lighted artificially except by incandescent electric lights or other approved method.

THE DRIER.

7th. All parts of the apparatus to be constructed of metal or non-combustible material, including the garner, supports, spouts, etc. All parts to be smooth so as to afford little chance for the lodgment of dust and dirt.

8th. Elevating machinery for reconveying the grain to the elevator to be located outside the drier building.

9th. When the drier is constructed to operate independently of the machinery in the elevator the enclosure containing the cables and elevating machinery operating the drier must be entirely of non-combustible material and must not communicate with either the main building or the drier building except by spout and cable openings.

10th. The spout leading from the drier to the machinery for reconveying the grain into storage to be provided with a cut-off slide so that the flow of grain from the drier can be controlled.

11th. The drier to be provided with a spout for draining the grain into the lower or ground floor or with a receiving hopper of sufficient size to contain all the grain in the apparatus.

Note. In case of fire the burning grain may be drawn into the hopper and smothered, or into the

ground floor, where the fire can be more easily extinguished.

12th. The blower or fan to be entirely of metal and provided with self-oiling bearings.

13th. The blower and steam coils to be located within the walls of the drier building.

14th. The steam supply and power to be so arranged that they can be independently controlled from outside the drier building.

15th. No other heat except steam to be used.

FIRES--CASUALTIES

The Northern Grain Co.'s elevator at Eleva, Wis., was destroyed by fire on December 23.

Robert Warner, engineer for the Elkton Grain Co., was badly burned by an explosion of gasoline in the engine room of the company's plant at Elkton, Mich., on December 18.

The elevator at Celina, Ohio, formerly operated by Le Blond, Davis & Co., was totally destroyed by fire of unknown origin on the night of December 30. The loss is about \$2,500, with no insurance.

The grain elevator and bean warehouse at Bancroft, Mich., owned and operated by W. H. Payne & Son, burned on December 27. About 30 women and girls were employed in the bean warehouse. The loss is about \$6,000, partially covered by insurance.

The Mandan Mercantile Co.'s grain elevator and lumber yard at Glen Ullin, N. D., were burned on December 14. The fire started in the elevator and the whole interior of the building was in flames when the firemen arrived. The loss is \$14,000 and is said to be about covered by insurance.

Fire which originated in the boiler room of the White River Chair Co.'s plant at White River Junction, Vt., on the night of December 16, destroyed a number of other buildings, including the grain and hay warehouse of Madden & Trumbull. Their loss is reported at \$5,000.

The Robinson Elevator at Goodrich, N. D., was burned on December 16, together with about 4,000 bushels of grain. The fire caught from the stove-pipe and the buyer, who was sleeping in the office, barely escaped with his life. The old blind horse which furnished the power for the elevator was saved.

The south wall of the Western Star Mill Co.'s elevator at Salina, Kan., gave way on December 29, under the pressure of thousands of bushels of wheat. The cold weather of several preceding days had caused several of the tie rods to break and the pressure of the wheat pushed out the side of the building.

R. H. Pettit's elevator at Verndale, Minn., caught fire at 11 o'clock p. m. on December 14, but the blaze was extinguished before much damage was done. The fire started from live coals dumped on the cement floor of the engine room in front of the boiler. These coals heated the cement sufficiently to ignite the planks and floor joists below.

Fire of supposed incendiary origin destroyed the Farmers' Elevator at Delft, Minn., on the night of December 27. The loss is said to have been fairly well covered by insurance. A fire had occurred in the elevator a few days previous to its destruction, but on that occasion it was discovered and extinguished before much damage was done.

The river steamer Joliet sank in the Illinois River at Henry, Ill., on the night of December 31. The boat had not been in use for some time, but was steamed up and partly loaded with corn, about 1,000 bushels being placed on board. The boat was then left for the night, and when the crew came down to resume their work the next morning, the boat was two feet under water. The Joliet was the latest boat built by the Wallace Co., and was supposed to be in good condition.

Hans Hanson, agent of the Cargill Elevator Co. at Barry, Minn., had a narrow escape from death while working in the elevator on December 12. He was attempting to throw off the belt that runs the wood saw, and in some manner was caught and whirled several times around the pulley. He was then thrown to the floor, his head striking on some protruding nails. Mr. Hanson received three bad cuts on the top and back of his head and his face and hands were badly bruised and lacerated.

Moore Stephens, agent for the Duluth Elevator Co. at Hancock, Minn., was caught in the belt of the gasoline engine on December 22 and instantly killed. He had apparently been trying to stop the engine when his clothing caught and he was whirled to his death. His neck and many of the bones of his body were broken and his left foot was hanging by shreds of flesh, being almost severed from his leg. The body of Mr. Stephens was found by a farmer who called at the elevator. He was 23 years of age and had been in the em-

ploy of the Duluth Elevator Co. for about six years. For the past two years he had been in charge of the house at Hancock.

Davis, Way & Co.'s grain warehouse at Tracy, Iowa, was consumed by fire, together with 8,000 bushels of oats, on December 19. A spark from a passing locomotive is supposed to have started the fire. The burned building was of frame construction and 20x50 feet in size.

Jay Tidd, an employee of the Kendall Elevator at Owatonna, Minn., met with a serious accident recently while at work in the house. It is supposed that he was climbing around in the top of the elevator and stepped on a loose board which tipped up and precipitated him to the floor quite a distance below. At any rate, he was found later in a semi-conscious condition. His entire scalp had been torn loose and was hanging at the back of his head and both his hands were lacerated. Mr. Tidd did not remember how he sustained the injury.

The new 30,000-bushel elevator at the Big Four crossing in Mattoon, Ill., owned by the Cleveland Grain Co., was totally destroyed by fire on the night of December 20. It contained about 20,000 bushels of grain, all of which was burned. The fire broke out at about 12 o'clock p. m. The loss is estimated at \$7,000 on the building and \$8,000 on its contents. Insurance to the amount of \$6,500 was carried on the property. The elevator had been completed and put in operation but a short time before the fire. It is the third to be burned on that same site within a period of about three years, and will probably not be rebuilt.

The Maple Leaf Elevator in Kansas City, Kan., owned by the Chicago Great Western Railway Co., was burned on the night of January 7, together with 300,000 bushels of wheat. Thirteen cars loaded with grain were burned. All the grain was owned by Kansas City dealers. The fire broke out at about 10 o'clock p. m. The elevator had a capacity of 1,000,000 bushels and was built in 1897. It was of frame construction, metal clad. The loss on the building and contents is \$550,000, with insurance of about \$233,000. The fire is supposed to have been caused by sparks generated by the friction of a belt.

The Harroun Elevator at Harlem, Mo., a suburb of Kansas City, was burned on January 6. The fire is supposed to have started in the top of the elevator near the roof and to have been caused by the friction of a belt rubbing against the woodwork. The fire was discovered at 12:30 o'clock, noon, and an alarm turned in. Owing to an insufficient water supply the firemen were unable to save the elevator, but did succeed in saving the power plant, which is valued at \$10,000. The big Armour Elevator "Q" near-by, was saved with difficulty. A number of freight cars on near-by sidings were saved. The burned elevator had been completed but a short time and had been in operation for only about two months. It is said to have cost \$165,000. The insurance on the building and contents is about \$121,000.

James Yarjen, an employee of the Nye-Schneider-Fowler Co.'s Elevator B at Fremont, Neb., met with an accident on December 12 that resulted in his death a few hours later. He was crossing the floor in the elevator to the speaking tube, and in some manner caught his right foot in a coil of rope of the car-puller just as the slack was taken up and in an instant his body was in mid-air with the rope wound tightly about it. Other employees heard his screams and at once stopped the machinery. His body was drawn up against the ceiling where the top of the drum extends through the second floor, the rope being drawn so tightly around him that his flesh was terribly mangled. He died within a few hours after being released. The unfortunate man was thirty-eight years old and leaves a wife and two children.

The floating elevator Malster, owned by the Elbarge Transfer Co., and valued at \$18,000, was burned early in the morning of December 23 near the piers of the Baltimore & Ohio Railroad at Baltimore, Md. The elevator was tied alongside the S. S. Brandenburg, into whose hold she had loaded about 20,000 bushels of corn for export to Germany. This task had been finished at midnight and the elevator was waiting for a tug to be towed to her berth. At 1:30 a. m. the alarm was sounded on the Brandenburg and her crew cast off the lines, permitting the elevator to float away from the big ship. This placed Watchman Lent in a most precarious position, for he was aboard with the flames roaring at his back and the icy river as his only avenue for escape. The breeze wafted the elevator, now a huge torch of flame, near a covered harbor lighter, and Lent escaped with a mighty leap, but not before the coat had been burned from his back. The burning elevator was towed out into the stream and the fire was finally extinguished and what remained of the elevator was beached.

SEEDS

The D. M. Ferry Seed Co. of Detroit, Mich., has decided to rebuild its warehouse at Pine Lake, near Charlevoix, Mich., which was burned on October 10. The new house will cost \$20,000 and will be equipped with a complete outfit of fire extinguishing apparatus.

The Albert Dickinson Co. of Chicago is reported to be negotiating for a lease of the mill building at Duluth, Minn., owned by the Russell-Miller Milling Co. of Minneapolis. If the deal is completed the Dickinson company will open a branch seed house in Duluth.

A petition was filed in the Federal Court at St. Joseph, Mo., on January 3, asking that the Missouri Valley Seed Co. of that city be declared bankrupt. The charge was made by local creditors, whose claims aggregate about \$2,000. It is alleged that the company has been in an insolvent condition for some time, and that this fact was known to the management.

F. E. Winans, grain and field seed merchant, 6 Sherman Street, Chicago, reports January 12: The market for future delivery of timothy seed is firmer, and there is an increase in the demand for both March and April seed; \$2.90 is now bid for either March or April. Cash seed firmer for desirable lots. This includes seed free from impurity and of good color. Ordinary or low-grade seed is holding steady without essential change in price.

The Routzan Seed Co.'s warehouse, located about three miles from Arroyo Grande, Cal., was destroyed by fire recently. The fire occurred at night and its origin is unknown. The building contained the bulk of the 1904 seed crop, which was unsold. The seeds were valued at \$20,000, on which there was but \$12,000 insurance. The stock seeds of those used for replanting were uninjured, being in a fireproof stone warehouse. A fireproof building will be erected at once to replace the one destroyed. The Routzan Seed Co. was formerly the McClure Seed Co.

A large seed warehouse may be erected in Council Bluffs, Iowa, for the joint use of the Shugart & Ouren Seed Co. of that city and the A. A. Berry Seed Co. of Clarinda, Iowa, if the negotiations now being conducted through the Council Bluffs Commercial Club are successful. It is proposed to erect the warehouse on the line of the Great Western Railway, which has tendered the choice of several sites and agreed to supply excellent trackage facilities. The A. A. Berry Seed Co. does not contemplate transferring its entire plant from Clarinda to Council Bluffs, but has been planning the establishment of a branch there as distributing point for some time. The Shugart & Ouren Seed Co. will not give up its present establishment in Council Bluffs if the new warehouse is built, but will use the added facilities in extending its business. An amalgamation of the two companies is not in view, but each would own an interest in the warehouse and the two would operate it under a friendly working agreement. So far, the project has not reached a positive stage. The A. A. Berry Co. has been in business for about six years and the Shugart & Ouren Co. for about twelve years.

Concerning the prominence of Toledo as a clover seed market, the Times-Bee in its issue of January 1 says: "The Toledo market has kept its head up among the markets of the world and retains its distinction of being one of the largest and most important markets on the globe. Prices are about \$1 a bushel higher than they were at the commencement of the year just closed for the cash and option seeds, and for alsike the improvement is \$1.45 a bushel, while timothy, owing to the large crop, is selling 10 cents a bushel less than it was a year ago. Aside from the fact that Toledo has the most enterprising seed merchants, one reason for the prominence is the fact that the city is located in the center of the clover belt. In 1860 Ohio and the immediate vicinity did not raise much clover seed. Gradually, however, the clover belt moved from the east westward, until Ohio, Indiana, Michigan and Wisconsin were counted among the largest producers, and of late years Toledo has drawn from Illinois, Kentucky, Tennessee, Kansas and Missouri. Methods of handling seed have changed with the advance of years, and while it formerly came to market in boxes, barrels or any receptacle the farmer had at hand, it now comes in tight cotton bags, insuring protection to the seed and the shipper. The trade in alsike and timothy is also increasing in Toledo, and the amount of money required to handle the clover crop is estimated by the bankers at close to \$2,000,000 annually. Toledo also enjoys the distinction of being the only market in the world in which clover seed is traded in for future delivery, and the clover seed quotations from

Toledo are scanned as closely as are the grain quotations from Chicago. The bulk of the receipts this year have come from Illinois, although Ohio, Michigan and Indiana have sent in some seed. The figures from the books of the Produce Exchange show the receipts and shipments for the calendar year, but as the clover seed year runs from September to May the calendar figures contain parts of two crops, and are interesting only as a round-up of a year's business, and not so far as they have direct bearing on the crop year." The heaviest receipts were during the months of March, September, October and November, and the heaviest shipments were made during January, February, March and April. The total receipts of clover seed at Toledo for 1904 were 96,556 bushels and the total shipments about 118,115 bushels.

OBITUARY

William Brown Jr., who for years was engaged in the hay and feed trade in Philadelphia, is dead. He was one of the most popular members of the Commercial Exchange.

H. H. Bartling, head of the Bartling Grain Co. and mayor of Nebraska City, Neb., died suddenly of heart failure on January 7. He was a pioneer resident of Nebraska City, locating there in 1866.

Isadore Blumenthal, who for years had been prominently connected with the barley and malt trade of Chicago, is dead. He made a large amount of money in barley, and is said to have lost it speculating in wheat.

Henry Weber, a prominent grain inspector and late superintendent of the Calumet Grain and Elevator Co.'s elevator, died recently at the home of his daughter in South Chicago. His death was due to a paralytic stroke. A widow and two daughters survive him.

John W. S. Jarboe, for a number of years engaged in the grain and feed business at Frederick, Md., died at his home in that city on December 20, aged 82 years. His death was caused by paralysis. Mr. Jarboe retired from active business about a year ago. He leaves a widow.

James E. Harrington, a prominent grain dealer, merchant and farmer of Morganfield, Ky., committed suicide by hanging himself in his barn on December 10. Worry over business matters is said to have been the cause of his rash act, although his financial affairs are thought to be in good condition. Mr. Harrington leaves a widow.

Joseph J. Rogers, a grain dealer and member of the Philadelphia Bourse, committed suicide at his residence in Medford, N. J., on December 30, by hanging. His friends state that brooding over the death of his wife and the excitement of the market brought on temporary insanity, and while in this condition he took his life. Mr. Rogers was 63 years of age.

Leonard G. Quinlin, senior partner of the New York grain brokerage firm of L. G. Quinlin & Co., and a member of the Produce Exchange, died at his home in that city on December 23. His death was caused by pneumonia and occurred after a brief illness. Mr. Quinlin was born in Baltimore and was of an old Southern family. He was in his sixty-ninth year.

Charles D. Hamill died at his residence, 2227 Prairie Avenue, Chicago, on January 11, after an illness of nearly two months. The deceased was born at Bloomington, Ind., in 1839, and came to Chicago in 1851. He found employment in a bank with his uncle and later became connected with the Marine Bank. In 1864 he resigned his position of teller in the bank to become an operator on the Chicago Board of Trade. As a member of the Board of Trade he was first associated with Howard Priestly, a large operator, but in 1873 he was one of the organizers of the firm of Van Inwagen & Hamill. He continued in this partnership until 1882, when he was associated with George Brine, and five years later began to trade under his own name alone. During the days when "Long John" Wentworth, P. D. Armour and other operators were at their prime, Mr. Hamill took a share in the big deals that were engineered on the board. He retired from active business a few years ago. Mr. Hamill was president of the Chicago Board of Trade in 1892 and 1893. It was largely through Mr. Hamill that the late Theodore Thomas was induced to come to Chicago from New York in 1891, and he was always actively interested in the welfare of the orchestra. In 1862 Mr. Hamill married Miss Susan Walbridge of Ithaca, N. Y., a daughter of Judge Walbridge. Mrs. Hamill is still living and the following children: Robert, Paul, Charles H., Philip W., and Laurence Hamill and Mrs. Edward J. Phelps. All are residents of Chicago except Paul and Laurence, who are in business in Montreal and

New York respectively. Charles H. Hamill, a son, is a law partner of Governor Deneen. Ernest A. Hamill, president of the Corn Exchange National Bank, is a brother of the decedent.

J. C. Brown, statistician of the New York Produce Exchange, died at his home in Brooklyn, on December 13, of pneumonia. The deceased was 52 years of age and had been the statistician of the Produce Exchange for nineteen years. Previous to that he had been in the office of the comptroller of the currency at Washington, D. C., and before that had held various government positions. He leaves a widow, one son and a daughter. Mr. Brown was regarded as an authority on grain crops.

Hugh McAlpin, inspector for the Grain Dealers' National Mutual Fire Insurance Co. of Indianapolis, Ind., died on January 7. He had been confined to St. Joseph's hospital and the hotel at Omaha from October 4 as the result of an accident, and had about recovered from his injuries, expecting to resume work January 1, when he contracted a cold which developed into pneumonia and resulted in his death. Mr. McAlpin had been connected with the company from the time of its organization and was a faithful and earnest worker for its interests.

P. Bird Price, formerly grain inspector of Illinois, died suddenly on January 7 at Elsinore Springs, Cal., where he was spending the winter. The funeral took place at Elsinore on January 9 and his body was taken to Pasadena and cremated. Mr. Price's death was due to apoplexy. He was born at Berlin, Ill., fifty-six years ago, and came to Chicago in his early youth. For many years he was prominent in Illinois republican politics and was appointed chief grain inspector by Governor Oglesby in 1882. From 1889 to 1893 he was continued in that position by Governor J. W. Fifer.

Arthur R. Hopkins, treasurer and general manager of the A. R. Hopkins Co., grain merchants of Bangor, Me., died at his home in that city on December 25, aged 56 years. Mr. Hopkins had been engaged in business in Bangor for more than thirty years. He was associated with his father in the grain and flour trade until the latter's death in 1878, the firm name being Hopkins & Son. After the death of the elder Mr. Hopkins his son continued the business alone until 1898, when the A. R. Hopkins Co. was formed. The deceased leaves a son and a daughter, his wife dying a few months ago.

John B. Lyon, a veteran member of the Chicago Board of Trade, died at his residence on December 20, after an illness of two weeks. Death was due to heart disease. Mr. Lyon had been a member of the Board of Trade for forty-six years, joining immediately after arriving in Chicago, and had participated in more "deals" in wheat and corn and had handled larger amounts of corn as a shipper than any other grain man in the West. Although of late years poor health had limited his activities, his last trades were closed out only on the day preceding his death. Between 1860 and 1879 the name of J. B. Lyon stood for immense deals in wheat and corn, straightforward honesty and great wealth. In August of 1872, following the short wheat crop of 1871, Mr. Lyon ran a "corner," in the course of which the price soared to \$1.62. The Lyon holding was estimated at 25,000,000 bushels, and stocks of wheat in Chicago were only 6,000,000 bushels. The deal failed, however, owing to the rushing of new crop wheat to market and the passing of a large amount of damp wheat as No. 2 spring for delivery. When Mr. Lyon saw what was coming he sold out and the deal is said to have cost him \$800,000. Preceding this deal Mr. Lyon had run several successful corners in corn in the middle '60s, in which he shipped the bulk of the crop to Buffalo for three successive years, and had the making of prices practically his own way. It was his custom to charter all the boats available on the lakes and move corn east so deliveries could not be made. In 1869 he ran a wheat deal for Angus Smith of Milwaukee, in which heavy profits were realized. Mr. Lyon handled so much corn in the '70s that the trade always was watching for a corner. In 1879 he shipped 50,000,000 bushels of corn. Mr. Lyon formed a number of partnerships, but the firm name generally was J. B. Lyon & Co. until he entered business with John Lester, when the style was Lyon & Lester. Earlier he was connected at different times with G. J. Boyne, now with Armour & Co., W. Meddows and J. Swartz. For more than twenty years he conducted, in connection with his grain operations, an immense sugar plantation at Patterson, La. He owned the town of Bellefontaine, Miss. At Ocean Springs, Miss., he had at the time of his death fifteen miles of oyster beds, and the entire Hollinger Island, off Mobile. His holdings of pine lands in the South and of real estate in and adjacent to Chicago were also large. Mr. Lyon was born in Canandaigua, N. Y., April 15, 1829, and married Miss Emily Wright in 1851. He left a son, John B. Lyon Jr., and three daughters, Mrs. Calvin Cobb of Boise, Idaho, Emily Wright Conger and Mrs. Robert Hamill.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Purchaser Entitled to Decide Order of Baling Hay.

A purchaser of hay in stacks was to be given assistance by the seller in baling it. The seller insisted upon deciding the order in which the hay should be baled, as that timothy should not be baled before clover hay; and when his right to decide the order in which the hay was to be baled was not conceded he made it impossible for the employees of the purchaser to go on with the baling. This, the Supreme Court of Michigan holds (*Fowles vs. Rupert*, 101 Northwestern Reporter, 202), he had no right to do. The purchaser who had bought all of the hay had a right to decide the order in which it should be baled, so long as it did not result in loss to the seller. The seller, then, being responsible for the failure to bale the hay, was not entitled to damages for failure to bale and take it away.

Not Evidence Against Last Carrier of Quality of Corn When Shipped.

A shipment of corn from St. Joseph, Mo., to Taylor, Tex., was found partly in a damaged condition when it reached Taylor. When and where the damage or injury to the corn occurred was not shown. Nor, independently of the recitals contained in the bill of lading and an inspector's certificate issued by an officer in Missouri, was there any evidence in the record indicating what was the condition and quality of the corn when it was delivered to the initial carrier and started on its transportation. But notwithstanding there was no evidence in the record, which showed that the corn was damaged or injured while in the custody of the last carrier, the trial court held it liable, evidently upon the presumption of law that attached liability to it as the last carrier.

Objection was made to the introduction in evidence of the inspector's certificate, and to the recitals contained in the bill of lading, showing the quality of the corn; and the Court of Civil Appeals of Texas holds (*International & Great Northern Railroad Co. vs. Diamond Roller Mills*, 82 Southwestern Reporter, 660), that both of these objections were well taken, and that the trial court erred in admitting this testimony. It says that in order to hold the last carrier liable under the presumption of law creating liability against it, the burden was upon the shipper to introduce evidence tending to establish the quality and condition of the article shipped at the time it was started, or at the time it was delivered to the initial carrier. A bill of lading may be used against a carrier that is not connected with its execution in some respect, as a contract between the consignee and the carrier that used the bill, as evidence of right in the consignee to demand the shipment from the last carrier.

The bill of lading is evidence of right in the consignee, and upon tender of that bill to a carrier who is not a party to it, but who has possession of the property, the shipper, or the consignee, as the case may be, who has possession of the bill and is the owner of the property, can demand possession of the same by virtue of the ownership displayed by the bill of lading. But the last carrier, having accepted the shipment for transportation under the bill of lading, was bound by it, in so far as it was a contract; though, in so far as it was a mere receipt for the corn, the rule was different.

The statement of the inspector in his certificate as to the quality and quantity of the corn shipped was a mere ex parte hearsay statement, that in nowise affected the last carrier. Whether such a certificate, if admissible under the laws of Missouri and serviceable as evidence there, would be admissible in Texas by virtue of such laws, the court says was a question that it was not called upon to decide, because that question was not raised.

MILLERS' NATIONAL INSURANCE COMPANY.

The twenty-ninth annual report of the Millers' National Insurance Company of Chicago, dated January 2, 1905, shows a steady growth of the company during the year, and a sound financial condition at its close.

The entire assessments levied during the year 1904 have amounted to only 9 per cent of the deposit notes in force, or less than one-half the annual rate charged by stock companies, equal to a cash dividend of 55 per cent. A reference to the financial statement below will show that the company's total admitted assets are now \$4,101,731.91, and losses paid from organization to date, \$4,632,914.85,

making this the largest and strongest company of its class in the world.

The annual average cost of insurance in the Millers' National Insurance Company for twenty-nine years has been about one-half the basis rate. In only one year, when the company was comparatively small and sustained heavy losses, has it cost as much as 70 per cent, while in another and later year it cost only 30 per cent of the annual rate, depending, of course, upon the amount of business done and the amount of fire losses sustained. As above stated, the average annual cost to policyholders for the past twenty-nine years has been about one-half the annual rate charged by stock companies.

The successful experience for over a quarter of a century in any kind of business may safely be taken as a precedent. Under like conditions, with the same conservative management and with ample cash funds, what has been accomplished in the past may reasonably be expected in the future.

The financial statement may be condensed as follows:

Assets—	
Bonds and stocks (par value \$792,214.05).....	\$ 831,705.05
Loans on Chicago real estate.....	116,000.00
Interest accrued	13,430.76
Cash on hand	99,143.51
Premiums in course of collection.....	17,372.37

Total cash assets.....	\$1,077,651.69
Liabilities—	
Losses adjusted and due.....	None
Reported and supposed losses.....	\$ 28,267.45
Reinsurance reserve	214,663.98
Guarantee deposits	155,371.84
All other claims.....	5,251.89

Total liabilities	\$ 403,555.16
Net cash surplus.....	\$ 674,096.53
Deposit notes subject to assessment (net value)	3,024,080.22

Surplus over all liabilities.....	\$ 3,698,176.75
Aggregate amount of admitted assets.....	4,101,731.91
Losses paid in 1904.....	290,380.69
Losses paid since organization.....	4,632,914.85
Net amount of insurance in force December 31, 1904.....	31,322,272.58

BARLEY AND MALT

John Braun and Alfred J. Braun of Buffalo, N. Y., have been granted United States letters patent No. 779,395 on a malt kiln.

United States letters patent No. 778,854 have been granted to Franklin B. Giesler of Milwaukee, Wis., on a malting drum.

W. E. Cooper, of the firm of T. M. Stevens & Co. of Portland, Ore., recently purchased a large quantity of barley on the Minneapolis market for shipment to Japan. The amount purchased is rumored to have been 200,000 bushels. This shipment is in the nature of an innovation in the American barley trade. While Japan and other countries of the Orient have been purchasing barley from Pacific Coast exporters for several years, none to meet their demands has ever been secured from as far east as Minneapolis.

The Seattle Brewing and Malting Co. of Seattle, Wash., purchased 1,000 tons of brewing barley of C. J. Broughton of Dayton, Wash., and 1,000 tons of Corbett Brothers of Huntsville, Wash., at one cent a pound f. o. b. The grain was stored at warehouses at Dayton, Turner and Huntsville. The two sales, requiring two trains of twenty-five cars each to move them, nearly clean up the barley crop of Columbia County. All the barley has been sold out of the farmers' hands with the exception of a few small lots. Purchasers from now on will pay the middleman's profits. Advices from Walla Walla, Wash., state that stockmen of that vicinity are anticipating a stiff advance in the price of feed barley. The demand for barley has been heavy this season, as the price of wheat has been prohibitive for feeding. The supply of barley was snapped up early in the season and buyers are casting about for future supplies. According to reports from Dayton, Wash., barley growers of that section will sow only about 75 per cent of the usual barley acreage the coming season. Several of the largest growers of Columbia County are sowing their land with wheat instead of the usual crop. The reason assigned is that wheat growers made more money this season, as the barley crop was a little short, and the present outlook is that wheat will bring a good price next season. With Columbia County, the largest barley-growing section in the Pacific Northwest, cutting down its acreage, there will probably be a

shortage next season with higher prices than have prevailed this.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.			
Imports—	Bushels.	Value.	
November, 1903	15,125	\$ 6,903	
November, 1904	36,542	17,971	
Eleven mo. end. Nov., 1903.....	32,722	16,029	
Eleven mo. end. Nov., 1904.....	88,636	43,236	
Exports—			
November, 1903	1,040,959	593,216	
November, 1904	2,274,657	1,165,260	
Eleven mo. end. Nov., 1903.....	8,201,349	4,746,175	
Eleven mo. end. Nov., 1904.....	7,136,235	3,882,095	
BARLEY MALT.			
Exports—			
November, 1903	24,739	18,586	
November, 1904	18,317	12,632	
Eleven mo. end. Nov., 1903.....	336,540	246,420	
Eleven mo. end. Nov., 1904.....	440,809	315,116	

PERSONAL

L. Hutchinson, until recently at La Crosse, Ind., is now at Joliet, Ill.

H. F. Wulf, formerly at Manning, Iowa, has removed to Carroll, that state.

E. D. Risser writes that he has moved from Ludlow, Ill., to Paxton, this state.

J. P. Jensen has resigned as wheat buyer for Quinn Bros. at Litchfield, Minn.

L. O. Bundy of Madrid, Iowa, has taken charge of the Neola Elevator Co.'s house at Neola, Iowa.

R. B. Meldrum of Dell Rapids, S. D., is now manager of Larkin & Thompson's elevator at Madison, S. D.

William Root, formerly a grain dealer at Newark, Ohio, is reported to be in a serious condition, owing to paralysis.

James Grace of Mitchell, S. D., has resigned his position with the M. & M. Mills and will buy grain for Truax & Betts at Loomis, S. D.

H. E. Emerson, chief deputy grain inspector at Duluth, and Miss Harriet Hall of Milwaukee were united in marriage at Chicago recently.

John S. Marfield, of the grain firm of Marfield Bros. at Chillicothe, Ohio., was stricken with apoplexy on December 29 and not expected to recover.

Albert Russell has taken the position of buyer and manager for the Bloomfield Elevator Co. of Bloomfield, Neb., succeeding Mr. Leap, who recently resigned.

Arthur Sorenson of Albert Lea, Minn., manager of an elevator at Grand Meadow, Minn., and Miss Tena Rasmussen were married at Albert Lea on December 20.

Frank Frohleich, agent for the Northwestern Elevator Co. at Bancroft, S. D., has been transferred to Willow Lakes, S. D. Andrew Frohleich succeeds him at Bancroft.

Edward J. Skewis, president of the Skewis-Moen Co., grain dealers of Minneapolis, and Miss Franc Scandrett, a niece of Governor Van Sant, were married at St. Paul recently.

Mason Hutchison of Tremont City, Ohio, who had been foreman of the Snyder Elevator since it was started, has accepted the position of superintendent of Early & Daniels' Big Four Elevator at Cincinnati, Ohio.

John Quigg, a prominent grain man of Minier, Ill., and president of the Minier Bank, was seriously injured at his home in that town on December 15. He was going downstairs to the basement, when in some manner he fell.

J. A. Polinske has resigned as wheat buyer for the State Elevator Co. at Lester-Prairie, Minn., and will devote his attention wholly to his implement business. Fred Hein of New Germany, Minn., succeeds him at the elevator.

H. L. Breitenstein of Gretna, Neb., has succeeded W. T. Weddell as grain buyer for J. T. Evans at Murdock, Neb. Mr. Weddell has been transferred to Prairie Home, Neb., where he will have charge of another of the Evans elevators.

S. J. Swanson, who has been buying wheat at Wylie, Minn., for the Red Lake Falls (Minn.) Milling Co. for several years, has been transferred to Thief River Falls, Minn., where he will have charge of a house for the same company.

H. T. Swart, secretary and manager of the Zenith Grain Co. of Winnipeg, Mann., and Miss Martha Preble Carey of Duluth, Minn., were married at the home of the bride's mother in that city on December 28. They are spending their honey-

moon in the East. Mr. Swart was formerly the Great Northern Elevator Co.'s representative at Duluth.

Among the prominent Duluth grain men who will spend the remainder of the winter at other points in this and foreign countries are: G. G. Barnum, who will go to Japan on the S.S. Minnesota, which sails from Seattle on January 22; Ward Ames Sr., who will make a tour of Mexico and M. J. Forbes, who will go to Pasadena, Cal.

Fred L. Rolf, of the firm of Merriam & Rolf, grain and flour dealers at Fitchburg, Mass., had a narrow escape from death in the animal inclosure at Whalom Park, that city, on December 16. Mr. Rolf had gone to the park to deliver some grain and the keeper being absent he entered the inclosure alone, carrying a bag of grain on his shoulder. He had only covered about one-half the distance from the gate to the animal shed when he was suddenly attacked by a large stag. Mr. Rolf dropped his grain and grabbed the animal by the antlers. The beast was getting the best of Mr. Rolf when he suddenly let go his hold on its antlers and picking up a loose board struck the angry animal over the head. This stunned it for a sufficient time to enable Mr. Rolf to run to the fence which surrounds the inclosure. He succeeded in scaling it before the stag reached him and escaped to his wagon. Mr. Rolf's hands were badly lacerated and his clothing torn.

TRANSPORTATION

The Chicago and Calumet rivers are supplying winter quarters for about 100 vessels.

Rice millers and handlers of New Orleans will ask the State Railroad Commission to adjust rates on clean and rough rice. It is claimed that the country miller is being favored at the expense of his New Orleans competitor.

The largest foreign grain charter made in Baltimore for the year 1904 was put through during the latter part of December, when the British steamer Skidly was engaged to make full January loading of grain at that port for Copenhagen.

Chicago shippers with through billing on Eastern roads which expired on January 5 were surprised to find how suddenly the car situation loosened on the roads on the following day. Cars were offered freely where before they could not possibly be had. Shippers were outspoken in their disgust over the situation.

The Salt Lake Grain and Produce Exchange has secured important concessions in the matter of freight rates on corn from the East. The Union Pacific and Oregon Short Line have announced they will give the same freight rates on grain from Missouri River points to all common points in Utah. The reduction is from 50 cents per 100 pounds to 40 cents. This places Utah on an equality with Idaho and other states that have been getting this rate for some time past. In view of the fact the haul from Kansas City is 500 miles less than to some of the common points in Idaho, the Salt Lake grain men insisted that the same rate should apply. The question had been under consideration for some time, and has finally resulted in victory for the Exchange.

At the meeting of the Eastern traffic men on January 5 no change was made in the advanced rates on grain, which went into effect on that date. The advance amounts to 2½ cents per 100 pounds on domestic and 1½ cents on export business. It was hoped that the old rate would be kept in force, but it seemed to be the sense of the meeting that the present lull in grain shipments east would be a good thing for the railroads, allowing them to clean up their tracks and get their rolling stock into good shape. It was admitted that even at the old rates the Southern roads were taking more than their share of the Western corn business. As things now stand Chicago shippers are up against a discrimination of 3 to 4 cents per bushel on corn, the Gulf being favored to that extent.

It is stated that Chicago grain shippers have only recently discovered the true inwardness of the stiff competition that they have been having on export business by way of Gulf ports from two Kansas City houses. The latter have been getting since December 29 a cut in rates amounting to nearly 3 cents per 100 pounds from the Missouri Pacific road. Under its workings the firms in question have been able to quote a through rate on corn to Europe and capture business to the extent of over 60,000 bushels. The firms were bidding prices apparently based on the reduced rates long before the latter were available to the general public. Without this cut the Western and Southwestern roads were working at such a big advantage over the Eastern roads on export business as to cause

a prominent Chicago shipper to predict on January 6 that the Eastern roads would be practically out of the corn export trade within a fortnight.

The Lake Erie Transportation Co., familiarly known as the Wabash Railway line, has contracted for a new 3,000-ton freighter for the package freight and grain trades. The new boat is to replace two old steamers on the Toledo-Buffalo route, which will be sold.

For years the Chicago grain men have been contending that the practice of making the Mississippi River the basing point in establishing through rates from the West to the East worked a hardship on this market, because it prevented grain from coming to Chicago elevators and being reshipped at the proportion of the original through rate. Through the efforts of E. B. Boyd, traffic manager of the Chicago Board of Trade, the railroads have been made to see that the point is well taken and that Chicago is the legitimate basing point. As a result the concession has been granted. At a meeting of committees of Eastern and Western traffic officials held in Chicago on December 27, the change was agreed upon. This will increase greatly the grain shipments to Chicago, and this grain can be taken out by the Eastern roads at their pleasure and re-shipped to the seaboard at the proportion of the original through rate. The action of the commit-

LATE PATENTS

Issued on December 13, 1904.

Drier.—John Scott, Milwaukee, Wis., assignor of one-half to Edward P. Mueller, Milwaukee, Wis. Filed April 23, 1904. No. 777,225. See cut.

Conveyor.—William T. James, Chicago, Ill. Filed Aug. 25, 1903. No. 777,375.

Conveyor.—William T. James, Chicago, Ill. Filed Oct. 14, 1903. No. 777,376. See cut.

Conveyor.—William T. James, Chicago, Ill. Filed Dec. 5, 1903. No. 777,377.

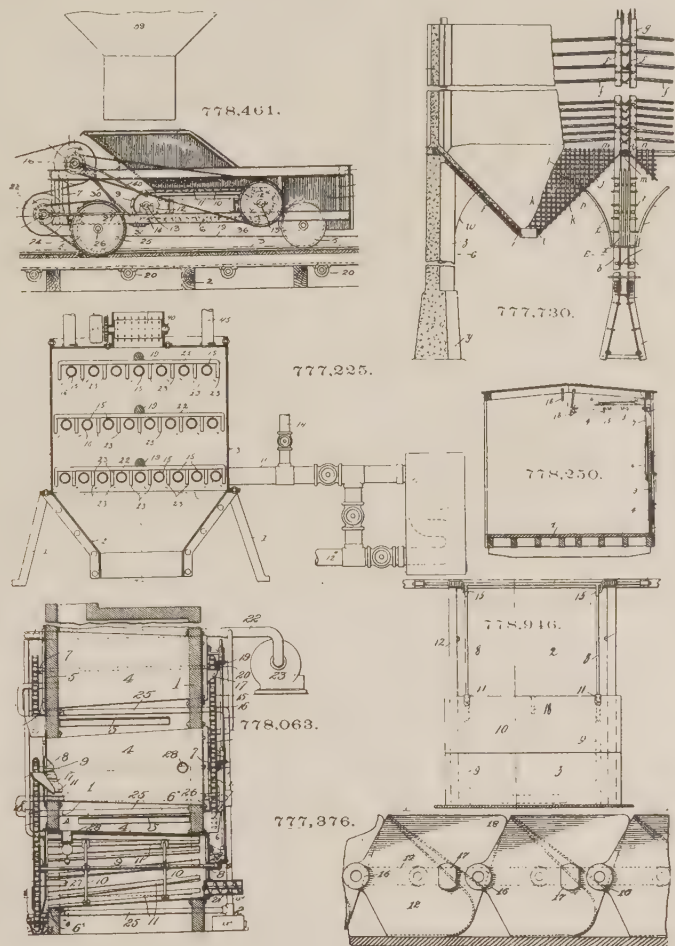
Issued on December 20, 1904.

Elevator Bin.—James A. Jamieson, Montreal, Canada. Filed Jan. 2, 1903. No. 777,730. See cut.

Drier.—John J. Murphy, Vincennes, Ind. Filed April 1, 1904. No. 778,063. See cut.

Issued on December 27, 1904.

Grain Door for Cars.—John H. Kennedy, Minneapolis, Minn. Filed Sept. 18, 1903. No. 778,250. See cut.



tees has yet to be approved by the freight associations interested, but there is no doubt it will be ratified.

Asked the question, Which is the best, white or yellow corn? Mr. Gwynn, the famous seed man of Shenandoah, Iowa, said: "That question has never been finally settled. The South prefers white, the East yellow, but it's only a prejudice, a whim. The South lives largely on white corn bread; the East doesn't eat much corn bread at all. Nine-tenths of the corn raised in this vicinity is white, because the farmers think the white varieties do better in this soil and climate."

Prof. Willet M. Hays of Minnesota, who has been appointed assistant secretary of agriculture, was director of the North Dakota Experiment Station before going to Minnesota; is secretary of the Plant and Animal Breeders' Association formed last year at St. Louis, and as a special student of the improvement of pedigree plants has originated and introduced two varieties of wheat, which are now grown upon several hundred thousand acres of land in Minnesota. The average yield of one of these varieties, "Minn. No. 169," is said to be 18 per cent above that of the variety it has displaced. He is 42 years of age.

Feeder for Belt Conveyors.—Lewis J. Robb, Pittsburg, Pa., assignor to Heyl & Patterson, Inc., Pittsburg, Pa. Filed Aug. 4, 1904. No. 778,461. See cut.

Issued on January 3, 1905.

Grain Door.—Ulysses M. Bogard and Albert L. Maple, Glassford, Ill. Filed June 10, 1904. No. 778,946. See cut.

Rotary Drier.—Frederick A. Wegner and Jesse D. Bourdeau, Detroit, Mich. Filed May 11, 1903. No. 779,106.

Portable Conveyor.—Charles H. Spence, St. Paul, Minn. Filed Nov. 4, 1903. No. 779,139.

At a grain growers' meeting at Manitou, Man., on January 3, "universal dissatisfaction was expressed at the multiplication of grades and the wide range of prices between each, the practical tests made under the direction of the territorial assembly proving that there is no such corresponding difference in the milling value of the wheat. The consensus of opinion was that unless something could be devised by which the spread between grades would be very much lessened, it would be in the interests of the farming community to have the grading system abolished and wheat bought and sold on sample according to its milling value."

CHICAGO AND COOK COUNTY GRAIN ELEVATORS.

BY E. P. ARNOLD, C. E.

Following is a directory of the storage, transfer, cleaning, grain drying and bleaching elevators located in Chicago and Cook County, together with notes of their construction, terminal facilities, etc., for use of railroads, commission men and insurance companies to January 1, 1905. Regular houses indicated by a star.*

Alton Elevator "A"—Capacity, 1,400,000 bushels. Owner and operator, Geo. A. Seaverns estate. Superintendent, John A. McDonald. Location, Twenty-second Street and Chicago River. Receives from Chicago & Alton Railroad. Fire protection, standpipes and hose throughout plant. Construction, frame, metal clad, gravel roof, stud partition bins. Storage house only. Not in operation. Office address, Rialto Building.

Alton Elevator "B"—Capacity, 600,000 bushels. Owner and operator, estate of Geo. A. Seaverns. Superintendent, John A. McDonald. Location, Twenty-second and Grove streets, C. & A. R. R. Fire protection, standpipes and hose throughout plant, supplied from pump in Alton Elevator "A." Construction, frame, metal clad, gravel roof, steel partition bins. Storage house only. Not in operation. Office address, Rialto Building.

***Armour Elevators "A" and "B"**—Capacity, 2,000,000 bushels. Owners and operators, Armour & Co. Superintendent, R. B. Gubbins. Location, Hooker and Rees streets, Goose Island. Receives from St. Paul R. R. and Marine Dock elevator. Fire protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad, all bins cribbed. Storage house only. Office address, Home Insurance Building.

***Armour Elevator "B Annex"**—Capacity, 3,000,000 bushels. Owner, P. D. Armour Co. Operator, same. Superintendent, R. B. Gubbins. Location, west of Armour "B" (and connected to same by belt conveyors). St. Paul R. R. Standpipes and hose throughout plant. Equipped with automatic sprinkler system. Frame, metal clad. Storage house only. Office address, Home Insurance Building.

***Armour Elevator "C"**—Capacity, 1,500,000 bushels. Owner, C. B. & Q. R. R. Operator, Armour Co. Superintendent, Wm. De Groodt. Location, Burlington Slip and Chicago River. C. B. & Q. R. R. Marine Dock Elevator. Fire protection, standpipes and hose throughout plant, 500-gallon fire pump, walls brick, cupola metal clad. Storage house only. All bins cribbed. Office address, Home Insurance Building.

Armour Elevator "D"—Capacity, 1,500,000 bushels. Owner, Armour Elevator Co. Operator, same. Superintendent, J. J. Becker. Location, Morgan Street and Chicago River. C. B. & Q. R. R. Marine Dock Elevator. Fire protection, standpipes and hose throughout plant, 750-gallon fire pump, walls brick, cupola of hollow tile, all bins cribbed. Storage, working and cleaning house. Office address, Home Insurance Building.

***Armour Elevator "E"**—Capacity, 1,000,000 bushels. Owner, C. B. & Q. R. R. Co. Operators, Armour & Co. Location, Fifteenth Street and Chicago River, C. B. & Q. R. R. Fire protection, standpipes and hose throughout plant, frame construction, slate clad, cupola metal clad, gravel roof, all bins cribbed. Storage house only. Not in operation. Office address, Home Insurance Building.

Armour Elevator "F"—Capacity, 800,000 bushels. Owner, C. B. & Q. R. R. Co. Operator, Armour Co. Location, Fifteenth Street and Chicago River, C. B. & Q. R. R. Fire protection, standpipes and hose throughout plant, walls brick, cupola frame, gravel roof. Storage house only. Not in operation. Office address, Home Insurance Building.

Atlantic Elevator—Capacity, 80,000 bushels. Owners' La Sier & Hooper. Superintendent, E. T. Freman. Location, north end of Goose Island, St. Paul R. R. Fire protection, barrels and pails, frame construction, metal clad, stud partition bins. Working, cleaning, dust packing and storage house. Office address, Rialto Building.

Badenoch Elevator and Feed Mill—Capacity, 125,000 bushels. Owner, J. J. Badenoch. Operator, same. Superintendent, Carl N. Gragg. Location, Seventeenth Street, west of Robey Street, C. B. & Q. R. R. Fire protection, barrels, pails and extinguishers. Frame, metal clad, gravel roof. Working, cleaning, milling and storage house. Office address, 44 South Desplaines Street.

Belt Line Elevator—Total capacity, 1,000,000 bushels. Owners, Rosenbaum Bros. Operators, same. Superintendent, F. W. Hess. Location, Stewart Avenue and Eighty-fifth Street. Belt Line R. R. Fire protection, standpipes and hose throughout plant. Equipped with automatic sprinkler system, 600-gallon fire pump, 60,000-gallon cistern, automatic journal alarm to all journals, walls brick, cupola metal clad (five metal storage

tanks at north end, each 110,000 bushels' capacity). Working, cleaning and storage house. Office address, Board of Trade Building.

Byrnes Elevator and Feed Mill—Capacity, 50,000 bushels. Owners and operators, G. W. Byrnes & Co. Location, 3149-51 La Salle Street, C. R. I. & P. R. R. Fire protection, barrels and pails. Frame construction, metal clad. Working, cleaning, milling and storage house. Office address, 3151 La Salle Street.

Calumet Elevator Co.'s Elevator "A"—Capacity, 1,000,000 bushels. Owners, Calumet Elevator Co. Operators, Bartlett, Frazier & Co. Superintendent, G. H. Hicks. Location, One Hundred and Second Street and Calumet River (Irondale). Belt Line R. R. Fire protection, standpipes and hose throughout plant, automatic journal alarm to all journals. Frame, metal clad. Working, cleaning, grain drying and storage house. Office address, 138 Jackson Boulevard.

Calumet Elevator Co.'s Elevator "B"—Location One Hundred and Second Street and Calumet River. Capacity, 1,000,000 bushels. Owners, Calumet Elevator Co. Operators, Bartlett, Frazier & Co. Superintendent, G. H. Hicks. Belt Line R. R. Fire protection, standpipes and hose throughout plant, automatic journal alarm to all journals. Frame, metal clad, gravel roof. Storage house only. Office address, 138 Jackson Boulevard.

***Calumet Elevator Co.'s Elevator "C"**—Location, One Hundred and Second and Calumet River. Capacity, 1,200,000 bushels. Owners, Calumet Elevator Co. Operators, Bartlett, Frazier & Co. Superintendent, G. H. Hicks. Fire protection, standpipes and hose throughout plant, automatic journal alarm to all journals. Frame construction, metal clad, gravel roof. Storage house only. Office address, 138 Jackson Boulevard.

Calumet Grain & Elevator Co.'s Elevators "A," "B" and "C" (practically one elevator)—Total capacity, 550,000 bushels. Location, Ninety-sixth Street and Calumet River, South Chicago. Owners, Calumet Grain & Elevator Co. Operators, same. Superintendent, Henry Weber, B. & O. R. R. Fire protection, standpipes and hose throughout plant. Construction, frame, metal clad. Working, cleaning, bleaching and storage house. Office address, Royal Insurance Building.

***Central Elevator "A"**—Capacity, 1,000,000 bushels. Location foot of South Water Street. Owners, Illinois Central R. R. Co. Operators, Bartlett, Frazier & Co. Superintendent, F. G. Roberts. I. C. R. R. and Marine Dock Elevator. Fire protection, standpipes and hose throughout plant, walls brick, cupola metal clad. Storage house only. Office address, 138 Jackson Boulevard.

Central Elevator "B" and "Annex"—Capacity, 2,000,000 bushels. Location, foot of South Water Street. Owner, Illinois Central R. R. Co. Operators, Bartlett, Frazier & Co. Superintendent, F. G. Roberts. I. C. R. R. and Marine Dock Elevator. Fire protection, standpipes and hose throughout plant, automatic journal alarm to all journals, walls brick, cupola metal clad. Working, cleaning, drying and storage house. Office address, 138 Jackson Boulevard.

Chicago & Erie Transfer Elevator—Capacity, 100,000 bushels. Owners, Chicago & Erie R. R. Co. Operators, Interstate Elevator Co. Superintendent, C. W. Austin. Erie R. R. Location, Fifth and Wallace streets. Fire protection, standpipe and hose throughout plant. Construction, frame, metal clad. Working, cleaning, storage and transfer house. Office address, 253 La Salle Street.

***Chicago, St. Louis and Annex Elevator (St. Louis Elevator)**—Capacity, 2,000,000 bushels. Location, Lime Street and Chicago River. Owners, Keith & Co. Operators, same. Superintendent, Nick Schmidt. Chicago & Alton R. R. and Marine Dock Elevator. Fire protection, standpipes and hose throughout plant. Construction, frame, slate clad, cupola metal clad, all bins cribbed. Storage house only. Office address, Rialto Building.

City Elevator—Capacity, 1,000,000 bushels. Location, Twelfth Street and Chicago River. Owners, Chicago Terminal Elevator Co. Not in operation. C. & N. W. R. R. and Chicago Terminal R. R. Marine Dock Elevator. Fire protection, standpipes and hose throughout plant. Construction, walls brick, cupola frame, all bins cribbed. Storage house only. Office address, Woman's Temple Building.

Columbia Elevator and Storage Tanks—Capacity, 420,000 bushels (four steel tanks of 80,000 bushels' capacity each). Location, Robey Street south of Blue Island Avenue. Owners, Armour Elevator Co. Not in operation. C. B. & Q. R. R. and Marine Dock Elevator. No fire protection. Construction, frame (except the four steel tanks), metal clad, but crumbling away with rust, and woodwork exposed. Cleaning and storage house. Office address, Home Insurance Building.

Englewood Elevator—Capacity, 250,000 bushels. Location, Sixty-fourth Street and Rock Island Railroad. Owners, Chicago & Rock Island R. R. Operators, United Grain Co. Superintendent, Mr. White. C. R. I. & P. R. R. Fire protection, bar-

rels and pails. Construction, frame, metal clad, stud partition bins. Working, cleaning, dust packing and storage house. Office address, Board of Trade Building.

Evanston Elevator & Coal Co. Elevator, Feed Mill, Coal Pockets and Hay Warehouse—Capacity, 15,000 bushels. Location, Chicago and Greenleaf avenues, Evanston. Owners and operators, Evanston Elevator & Coal Co. Superintendent, E. G. Cline. Construction, frame, part metal clad. No fire protection. Office address, 813 Davis Street, Evanston.

Fitchburg Elevator—Capacity, 50,000 bushels. Location, Thirty-ninth Street and Stewart Avenue. Owner, E. J. Lehmann estate. Operators, Williams Grain Co. Wabash Railroad. Construction, frame. Cleaning and storage house. Office address, Thirty-ninth and Stewart Avenue.

Gerstenberg Elevator—Capacity, 60,000 bushels. Location, Fifty-second Avenue, Cragin. Owner, Gerstenberg. Not in operation. St. Paul R. R. Construction, frame, metal clad. Cleaning and storage house.

Galena Elevator—Capacity, 700,000 bushels. Location, North Water Street, west of Rush Street (Chicago River and Rush Street Bridge). Owners, Chicago Railway Terminal Co. (Receiver.) Not in operation. Fire protection, standpipes and hose throughout plant. Construction, frame, slate clad, cupola metal clad. C. & N. W. R. R. and Marine Dock Elevator. Storage house only. Office address, Woman's Temple Building.

Grand Crossing Elevator—Capacity, 60,000 bushels. Location, north of Seventy-seventh Street and Illinois Central R. R., Grand Crossing. Owner and operator, F. G. Ely. Superintendent, H. S. Wenner. I. C. R. R. Fire protection, barrels and pails. Construction, walls brick, cupola metal clad, roof gravel. Working, cleaning, bleaching and storage house. Office address, 96 Traders' Building.

Hawkeye Elevator—Capacity, 700,000 bushels. Location, West Hammond, Ill. Owners, Fitzgerald & Chase. Not in operation. Chicago Junction R. R. and Michigan Central R. R. Fire protection, barrels and pails. Construction, frame, metal clad. Cleaning, storage, grain drying and bleaching house. Office, Exchange Building, Stock Yards.

Hayford Elevator—Capacity, 30,000 bushels. Location, Seventy-fifth Street and Central Park Avenue. Owner and operator, Frank Marshall. Not in operation. No fire protection. Construction, frame. Belt Line & Grand Trunk R. R. Cleaning, grain drying, bleaching and storage house.

Indiana Elevator and Mill—Capacity, 1,500,000 bushels. Location, Twentieth Street and Chicago River. Owner, Western Indiana R. R. Operators, American Cereal Co. Superintendent, A. G. Deighton. W. I. R. R. and Marine Dock Elevator. Fire protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad, all bins cribbed. Working, cleaning, milling and storage house. Office address, Railway Exchange Building.

Iowa Elevator—Capacity, 1,500,000 bushels. Location, Fourteenth Street and Chicago River. Owners, Chicago Railway Terminal Elevator Co. Operators, Harris, Scotten & Co. Superintendent, A. L. Parker. C. & N. W. R. R. and Chicago Terminal R. R. and Marine Dock Elevator. Fire protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad, all bins cribbed. Working, cleaning, grain drying and storage house. Office address, Board of Trade Building.

Mueller Young Elevator—Capacity, 500,000 bushels. Location, 5601-19 Stewart Avenue. Owners and operators, Mueller Young Grain Co. P. F. W. & C. R. R. Fire protection, standpipe and hose throughout plant. Construction, working part fireproof construction, bins cribbed in storage part and enclosed in 3-16-inch steel on outside. Working, cleaning and storage house.

Mabbatt Elevators "A" and "B"—Capacity, 1,200,000 bushels. Location, Archer Avenue and South Wood Street. Owner, George H. Seaverns estate. Operator, same. Superintendent, John McDonald. C. & A. R. R. Fire protection, barrels and pails. Construction, frame, metal clad. Working, cleaning and storage house. Office address, Rialto Building.

Matteson Elevator—Capacity, 30,000 bushels. Location, Matteson, Ill. Owners, Michigan Central R. R. Operator, C. L. Dougherty. Superintendent, Jas. Kier. M. C. R. R. Fire protection, barrels and pails. Construction, frame. Cleaning, bleaching and storage house. Office address, 119 Traders' Building.

McReynolds Elevator "A"—Capacity, 1,500,000 bushels. Location, One Hundred and Sixth Street and Calumet River, Colehour. Owners and operators, McReynolds & Co. Superintendent, Paul Blum. P. F. W. & C. R. R. Fire protection, barrels and pails, automatic journal alarm to all journals. Construction, frame, metal clad, all bins cribbed. Working, cleaning and storage house. Office address, 240 La Salle Street,

McReynolds Elevator "B"—Capacity, 1,000,000 bushels. Location, West Fifteenth and South Wood Street. Owners and operators, McReynolds & Co. Superintendent, C. D. Hulverson. Chicago Terminal R. R. Co. Fire protection, standpipe and hose throughout plant. Construction, frame, metal clad, gravel roof, automatic journal alarms to all journals. Working, cleaning and storage house. Office address, 240 La Salle Street.

Mercer Elevator—Capacity, 80,000 bushels. Location, 1268-74 West Twelfth Street, plant under reconstruction. No fire protection. Frame, metal clad, gravel roof. Cleaning, grain drying and storage house.

Merritt Elevator—Capacity, 600,000 bushels. Location, Ninety-eighth Street and Calumet River, South Chicago. Owners and operators, W. H. Merritt & Co. P., F. W. & C. R. R. Fire protection, standpipes and hose throughout plant, automatic journal alarm to all journals. Construction, frame, metal clad. Working, cleaning and storage house. Office, 234 La Salle Street.

Michigan Central Transfer Elevator "A"—No capacity. Location, one mile south of Kensington, Ill. Owners, Michigan Central R. R. Co. Operator, F. H. Mealiff. Superintendent, Albert Keller. Terminal of Michigan Central R. R. Protection, barrels and pails. Construction, frame, metal clad. Transfer house only.

Michigan Central Elevator "B"—Capacity, 30,000 bushels. Location, one mile south of Kensington, Ill. Owners, Michigan Central R. R. Operator, F. H. Mealiff. Superintendent, Albert Keller. Terminal of Michigan Central R. R. Protection, barrels and pails. Construction, frame, metal clad. Working, cleaning and transfer house.

Middle Division Elevator—Capacity, 30,000 bushels. Location, Harvey, Ill. Owners, Rodgers & Co. Superintendent, J. Wilson. Receives from G. T. R. R. Protection, barrels and pails. Construction, frame, metal clad. Cleaning, bleaching and storage house. Office address, Royal Insurance Building.

Minnesota Elevator—Capacity, 500,000 bushels. Location, Weed Street, Goose Island. Owners and operators, Armour Elevator Co. Superintendent, W. J. Calvert. Terminal of St. Paul R. R. Marine Dock Elevator. Protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad. Cleaning, grain drying, storage. Office address, Home Insurance Building.

Minnesota Annex Elevator—Capacity, 1,500,000 bushels. Location, Weed Street, Goose Island. Owners and operators, Armour Elevator Co. Superintendent, W. J. Calvert. Terminal St. Paul R. R. Protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad, roof gravel. Storage house only. Office address, Home Insurance building.

National Elevator—Capacity, 800,000 bushels. Location, Wallace and Archer avenues. Owners, National Elevator & Dock Co. J. B. Wayman, manager. Operators, Harris, Scotten & Co. Superintendent, A. L. Parker. Terminal Chicago & Alton R. R. Marine Dock Elevator. Protection, barrels and pails. Construction, walls brick, cupola of tile. Storage house only. Office address, owner, Rialto Building. Operator, Board of Trade Building.

Nebraska City Elevator—Total capacity, 2,000,000 bushels. Location, Twenty-third Street and Chicago River. Owners, Nebraska City Packing Co. Not in operation. Terminal Chicago & Alton R. R. Marine Dock Elevator. Protection, standpipes and hose throughout plant. Construction, main part, walls brick, cupola metal clad, deck houses frame, part metal clad. Cleaning and storage house. Office address, Woman's Temple Building.

Grand Trunk Western Elevator (formerly New England)—Capacity, 100,000 bushels. Location, Forty-ninth Street and Homan Avenue, Elsdon. Owners, C. & G. T. R. R. Operators, La Sier and Hooper. Superintendent, E. T. Freman. Terminal G. T. R. R. Protection, barrels and pails. Construction, frame, metal clad. Cleaning, storage and transfer house. Office address, Rialto Building.

Oxford Elevator—Capacity, 100,000 bushels. Location, Ninety-fourth Place and Commercial Avenue, South Chicago. Owners, E. A. Lord & Son. Operators, same. Superintendent, F. E. Lovett. On Belt Line R. R. Protection, barrels and pails. Construction, frame, metal clad. Cleaning and storage house. Office address, Rialto Building.

Peavey Elevator "A"—Capacity, 700,000 bushels. Location, One Hundred and Third Street and Calumet River, Irondale. Owners and operators, Peavey Grain Co. Superintendent, C. S. Odell. On Belt Line R. R. Marine Dock Elevator. Protection, sprinkler system and standpipes and hose throughout plant. Construction, frame, metal clad. Cleaning and storage house. Office address, Board of Trade Building.

Peavey Elevator "B"—Capacity, 1,700,000 bushels. Location, One Hundred and Third Street and Calumet River, Irondale. Owners and operators,

Peavey Grain Co. Superintendent, C. S. Odell. On Belt Line R. R. Protection, sprinkler system, standpipes and hose throughout plant. Construction, frame, metal clad. Storage house only. Office address, Board of Trade Building.

Pennsylvania Transfer Elevator—Capacity, 180,000 bushels. Location, Fifty-seventh and Leavitt streets. Owners and operators, Pennsylvania R. R. Co. Superintendent, George Connell. Terminal Pennsylvania R. R. Protection, standpipes and hose throughout plant. Construction, frame, metal clad. Cleaning, transfer and storage house.

Requa Bros. Elevator—Capacity, 100,000 bushels. Location, Forty-fourth Street and Wabash R. R. Owners and operators, Requa Bros. Superintendent, Isaac Weeks. Terminal Wabash R. R. Protection, standpipes and hose. Construction, frame, metal clad. Cleaning, bleaching and storage house. Office address, Board of Trade Building.

Rialto Elevator—Capacity, 1,000,000 bushels. Location, One Hundred and Fourth Street and Calumet River, Irondale. Owners and operators, Rialto Elevator Co. Superintendent, B. L. Simmons. On Belt Line R. R. Protection, standpipes and hose throughout plant. Fireproof construction, steel bins, frame and cupola, outside main building veneered with tile. Cleaning and storage house. Office address, 617 Rialto Building.

Irondale Elevator "A"—Capacity, 1,000,000 bushels. Location, One Hundred and Eighth Street and Calumet River. Owners and operators, J. Rosenbaum Grain Co. Superintendent, J. D. Sayre. On Belt Line and C. R. I. & P. R. R. No fire protection. Fireproof construction, steel frame, bins and cupola. Cleaning and storage house. Office address, Rialto Building.

Rock Island Elevator "A"—Capacity, 1,200,000 bushels. Location, Twelfth Street and Chicago River. Owners, C. R. I. & P. R. R. Co. Operators, Sanborn & Co. Superintendent, Jeremiah McKee. Terminal C. R. I. & P. R. R. Protection, standpipes and hose throughout plant. Construction, frame, metal clad. Storage house only.

Rock Island Elevator "B"—Capacity, 800,000 bushels. Location, Fourteenth Street and Chicago River. Owners, Chicago, Rock Island R. R. Co. Operators, Sanborn & Co. Superintendent, Jeremiah McKee. Terminal Rock Island R. R. Protection, standpipes and hose. Construction, walls brick, cupola metal clad. Storage house only.

Santa Fe Elevator "A"—Capacity, 1,500,000 bushels. Location, South Wood Street and West Branch Chicago River. Owners, Santa Fe R. R. Co. Operators, Harris, Scotten & Co. Superintendent, A. L. Parker. Foreman, Marcus A. Barney. Terminal of Santa Fe R. R. Marine Dock Elevator. Protection, standpipes and hose throughout plant. Automatic general alarm to all journals. Construction, frame, metal clad. Cleaning, grain drying, bleaching and storage house. Office address, Rialto Building.

Sibley Elevator "A"—Capacity, 100,000 bushels. Location, Thirty-first Street and Stewart Avenue. Owner, L. M. Fairbanks. Not in operation. On Wabash R. R. No protection. Construction, frame. Cleaning and storage house.

St. Paul and Fulton Annex Elevators—Capacity, 1,200,000 bushels. Location, foot of Fulton Street. Owners, St. Paul R. R. Co. Not in operation. Terminal St. Paul R. R. Marine Dock Elevator. No protection. Construction, St. Paul Elevator, walls brick, cupola metal clad; Fulton Annex, metal clad.

South Chicago Elevator "C" and "Annex"—Capacity, 3,000,000 bushels. Owners, Chicago & Rock Island R. R. Co. Operators, South Chicago Elevator Co. Superintendent, E. M. Ashley. Location, Ninety-third Street and Harbor Avenue, South Chicago. Terminal of Rock Island R. R. Marine Dock Elevator. Protection, sprinkler system. Standpipes and hose and Niagara hydrants. Construction, "C" Elevator, frame, metal clad; "Annex," wall brick. Storage house only. Office address, 240 La Salle Street.

South Chicago Elevator "D"—Capacity, 1,500,000 bushels. Location, Ninety-third Street and Harbor Avenue, South Chicago. Owners, Chicago & Rock Island R. R. Co. Operators, South Chicago Elevator Co. Superintendent, E. M. Ashley. Protection, standpipes and hose. Cleaning, grain drying and storage house. Office address, 240 La Salle Street.

Steg Bros' Elevator—Capacity, 40,000 bushels. Location, on M. C. R. R., Matteson, Ill. Owners and operators, Stege Bros. On Joliet cut-off M. C. R. R. No protection. Construction, frame, metal clad. Cleaning, transfer and storage house.

Truitt's Tank Elevator—Capacity, 90,000 bushels. Location, Eighty-fifth Street and Stewart Avenue. Owner and operator, R. H. Truitt. Not in operation. On Belt Line R. R. No protection. Three steel tanks with frame metal working part. Storage only.

Union and Annex Elevator—Capacity, 1,800,000 bushels. Location, Sixteenth Street and Chicago River. Owners, Chicago Railway Terminal Elevator Co. Operators, Harris, Scotten & Co. Superintendent, A. L. Parker. Foreman, J. H. Se-

nax. Terminal Chicago & Alton R. R. Marine Dock Elevator. Protection, standpipes and hose throughout plant. Construction, elevator walls brick, cupola metal clad. Annex, frame, metal clad. Storage house only. Office address, Board of Trade Building.

Wabash Elevator—Capacity, 1,300,000 bushels. Location, Thirty-third Street and Chicago River. Owners and operators, Rodgers, Bacon & Co. Terminal Wabash R. R. Protection, standpipes and hose throughout plant. Construction, walls brick, cupola metal clad. Cleaning, grain drying and storage house. Office address, Royal Insurance Building.

Walther's Elevator and Feed Mill—Capacity, 25,000 bushels. Location, 6427 Wentworth Avenue, Englewood. Owner and operator, H. F. Walther. Construction, frame, metal clad. Cleaning, feed grinding and storage house.

AS TO GASOLINE.

One pint of gasoline will impregnate two hundred cubic feet of air and make it explosive. Never leave an open can containing gasoline in a room.

Exhaust pipes or pots should not be allowed in contact with woodwork. They carbonize the wood and pave the way for a fire.

The man who looks for a gasoline leak with a match will always remember it—or his heirs will.

Gasoline tanks, whether above or below ground, should be housed so that they can be locked up and prevent inquisitive persons with cigars or matches causing trouble.

Always handle your gasoline by daylight. This will avoid the collection of your life insurance and reduce your fire hazard.

Gasoline is like a mule. Learn how to handle and then keep your eye on it.

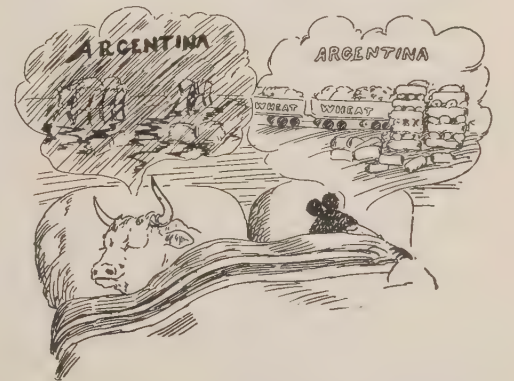
Water will not put out a gasoline fire, but spread it. Smother such fires with sand. With nothing else at hand, try smothering with small grain and then wet it.—Grain Dealers' National Mutual Fire Insurance Co.'s Calendar.

A review of the year 1904 shows that the grain export business of Boston has fallen off nearly one-half in comparison with 1903. The total shipments by all the steamship lines leaving here aggregated 7,316,019 bushels of wheat, corn, oats and barley, while the preceding year the exports totaled 14,095,817, showing a decrease for 1904 of 6,779,828 bushels. The following is the table of exports for the past four years:

	Wheat.	Corn.	Oats.	Barley.
1904	2,671,786	4,311,809	78,722	253,702
1903	6,738,533	7,063,855	185,542	253,702
1902	15,307,351	798,097	514,741	92,803
1901	20,084,378	11,044,197	3,979,084	.....

A press report from Washington, D. C., dated December 29, says: "Secretary Wilson to-day promulgated a circular giving the results of tests made in accordance with an act of the last Congress directing him to obtain in the open market samples of seeds of grass, clover or alfalfa, test the same, and if in any such seeds any Canadian blue grass is found under any other name than Canada blue grass or 'poa compressa,' to publish the result of these tests with the names of the dealers selling the adulterated alfalfa seed. Samples were obtained by department agents from 742 seed houses throughout the country, and out of these there were twenty-three lots, sold by eight dealers in all, found to be adulterated."

SWEET SLEEP AND PLEASANT DREAMS.



The "bull" dreams and believes that the rain has hurt the Argentine crop (as Inglis claims), while the "bear" sees a big crop of fine quality wheat, gathered and moving, and thinks Liverpool is as well posted as Inglis. It's well that both think their opinions as to weather and crop in Argentine are correct, but one of them will probably "wake up" some day and find he's been wrong. Who will it be?—Zahm's Circular.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

BAGS FOR SALE.

10,000 second-hand, 2-bushel grain bags, 10,000 140-pound export flour bags, 5,000 5-bushel oat bags. Cheap.

WILLIAM ROSS & CO., 57 So. Water St., Chicago, Ill.

OHIO MILL FOR SALE.

In Auglaize County, located in good wheat country with plenty of wheat from farmers, our 60-barrel steam, sifter mill, lately remodeled and running full time on solid established trade. Good exchange trade, with meal, buckwheat and rye flour machinery complete. Reason for wanting to sell is not lack of trade. Further information to interested parties.

RINEHART BROS., Uniopolis, Ohio.

FOR SALE.

Grain elevator, coal and ice business in city of 10,000, county seat of richest agricultural county in Ohio. Building contains nine coal bins, capacity 600 tons; icehouse, plaster and cement storage room, grinding room, containing New Kellie Cob Mill; corn sheller, Clipper Grain Cleaner; grain elevator capacity 800 bushels per hour; elevator bins, capacity 8,000 bushels. Garr Scott Engine, 25 h. p.; boiler, 60 h. p.; shafting and belting complete. Side-track running full length of property. Horses, harness, wagons. Coal and ice tools complete; finest wagon scales, office building in addition. Address

HURON COUNTY REAL ESTATE CO., Norwalk, Ohio.

GRAIN AND SEEDS

WHITE WHEAT FOR SALE.

If in need of white wheat write or telegraph SAM WILLIAMSON, Salt Lake City, Utah.

WESTERN HEADQUARTERS

For Alfalfa, Clover, Timothy, Millet, Sorghum and Kaffir Corn. Write for prices.

MISSOURI SEED CO., Kansas City, Mo.

OATS AND CORN.

For sale, 2,000 bushels of seed turf (winter) oats. Also 15,000 bushels white milling corn. Address JOHN A. TYNER & CO., Nashville, Tenn.

FOR SALE.

Dwarf Essex rape in car lots for sale. Can make very favorable prices delivered your station for through shipment from Europe. When in market ask for prices from the direct importers.

HENRY NUNGESSER & CO., Seed Merchants, New York, N. Y.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

SCALES FOR SALE.

Fairbanks Standard Scales at 70-80 per cent discount (new); don't pay any more; don't buy second-hand scales when you can get the genuine Fairbanks Standard, new, for less money. Address for particulars.

P. O. BOX 194, Chicago, Ill.

MACHINERY

ATLAS ENGINES.

For sale, 15, 20 and 25 horsepower Atlas Engines and Boilers in A-1 condition. Prices low. WALLACE MACHINERY CO., Champaign, Ill.

FOR SALE.

One 15-horsepower engine, 20-horsepower boiler, f. o. b. Dwight, Ill. Price, \$150. Address MERRITT BROS. & CO., Dwight, Illinois.

FOR SALE.

One 15-horsepower Erie Gas Engine. This engine is in fine repair and is running every day. Address

W. J. JENKINS, St. Paris, Ohio.

ELEVATORS

KANSAS ELEVATORS.

Elevators for sale in Kansas. Address E. J. SMILEY, 37 Crawford Bldg., Topeka, Kan.

ELEVATOR FOR SALE.

Capacity 10,000 bushels, located at West Concord, Minn. Good crops. Address C. W. FAIRBANK, West Concord, Minn.

FOR SALE.

Western Iowa elevator for sale. Capacity, 8,000 bushels, with 5-horsepower gasoline engine; in town with two lines of railroad and good grain station. Address

LOCK BOX 188, Ida Grove, Iowa.

FOR SALE.

New Hartford Elevator and Mill, situated at New Hartford, Iowa. Capacity, 15,000 bushels; steam power, 35-horsepower engine, 50-horsepower boiler; Cylinder Corn Sheller; Scientific Feed Grinder; new wagon scale; No. 3 Oat Clipper and all other things necessary to make it a first-class outfit of its kind. Good retail business. A money-maker for the right man. Terms reasonable. Address LOCK BOX NO. 2, New Hartford, Iowa.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

PARTNER WANTED.

Mill and elevator machinery and supplies. The best line of specialties on the market. Exclusive agency. No stock carried. Liberal commissions. Business established. A good opening for good worker with some capital. Address

L. C., Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATORS WANTED

ELEVATOR OR MILL WANTED.

In Kansas or Nebraska, if priced right, in exchange for 640-acre stock farm in Southern Missouri, close to good railroad town. Abundant range and water; two sets of improvements; some stock. Or will sell. Address, stating price, etc.,

C. T. MANN, Marietta, Kan.

GRAIN WANTED

GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

WINTER WHEAT WANTED.

Shippers of winter wheat will do well to communicate with us. We take C. & O. or Kanawha & Michigan delivery.

TURLEY & STEELE, Brokers, Charleston, W. Va.

Burlap Bags!! Grain Bags!!

ALL SIZES MADE TO ORDER

W. J. JOHNSTON, 182 Jackson St., Chicago.

FOR SALE

Paxton Mill,	-	Harrisburg, Pa.	1,200 bbls.
Swartley Mill,	-	Doylestown, Pa.	120 "
Mingle-Fulmor Mill,	-	Hatboro, Pa.	100 "
York Mill,	-	York, Pa.	200 "
Gochnauer Mill,	-	Boiling Springs, Pa.	100 "
Seaboard Mill,	-	Reading, Pa.	400 "
Columbia Mill,	-	Columbia, Pa.	150 "
Loucks-Codorus Mill,	-	York, Pa.	125 "
Freed Mill,	-	North Wales, Pa.	100 "
Stony Creek Mill,	-	Norristown, Pa.	50 "

C. H. DEMPWOLF, YORK, PA.

ROOFING AND SIDING.

SYKES STEEL ROOFING CO.

611 So. Morgan Street, Chicago



MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

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THE UNION ELEVATOR CO.

BUYERS AND SHIPPERS

WHEAT, CORN, OATS, HAY AND STRAW

OUR SPECIALTY: RECLEANED ILLINOIS SHELLED CORN

CLEVELAND, O.

KANSAS CITY

Geo. A. Adams Grain Co.

KANSAS CITY, MO.

Consignments and orders for future delivery solicited

Milling Wheat a Specialty

BATTLE CREEK

McLane, Swift & Co.,

Buyers of

GRAIN

Battle Creek, Mich.

CORRESPONDENCE FROM EASTERN BUYERS SOLICITED.

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BUFFALO

W. W. ALDER

T. J. STOFER

Alder & Stofer COMMISSION MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

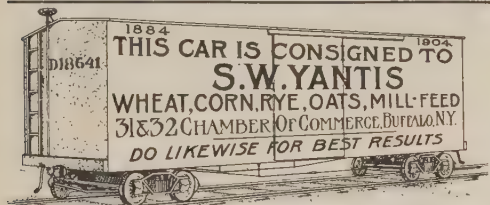
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BUFFALO - - NEW YORK

Consign Your Grain to

BURNS BROS.

44 Board Trade, Buffalo, N. Y.

QUICK SALES. IMMEDIATE RETURNS. RELIABLE REPORTS.
Members Grain Dealers National Association.



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Musson & De Reyna BROKERS AND FORWARDING AGENTS

New Orleans, La.

Consignments and Correspondence Solicited.

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The Wm. S. Gilbreath Seed Co.

WHOLESALE
FIELD SEED MERCHANTS
INDIANAPOLIS, IND.

Buyers and sellers of Field Seeds will do well to correspond with us; we handle in large quantities:

Red Clover, White Clover, Red Top, Hungarian, Kafir Corn,
Timothy, Alfalfa, Orchard Grass, Dwarf Essex Rape, Peas,
Alsike, Blue Grass, Millets, Cane,

Send us your samples or ask for ours

New Phone 4313

Old Phone 4380

Robinson's Cipher

NATIONAL GRAIN & HAY CO.

Grain, Hay, Flour and Feed Commission

Top Market Prices—Quick Returns

46 Board of Trade,

INDIANAPOLIS, IND.

PITTSBURG

GEIDEL & CO., COMMISSION MERCHANTS GRAIN, HAY AND STRAW.

MEMBERS OF
National Hay Association
Pittsburg Grain and Flour Exchange.
Grain Dealers' National Association.

PITTSBURG, PA.

WE USE ROBINSON'S AND HAY AND GRAIN CIPHERS.
Official Market Report Mailed Regularly on Request.

C. A. FOSTER

McCance Block, Cor. Seventh Ave.
and Smithfield St., Pittsburg, Pa.

Established 1878

Wholesale Grain, Hay and Mill Feed

CONSIGNMENTS SOLICITED

References: The Colonial Trust Co., Pittsburg, Pa.

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CLOVER HAY

We are in a position to place this commodity to the best advantage. Write us for special billing.

DANIEL McCAFFREY'S SONS CO.
PITTSBURG, PA.
ESTABLISHED 1867

References: Washington National Bank,
Duquesne National Bank.

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SAMUEL WALTON Hay, Corn, Oats

Rooms 4 and 5, No. 8 Wood Street
PITTSBURG, PA.

Will buy outright or sell on usual rates of commission.
Liberal Advancements made on Consignments

KEIL & THORNE RECEIVERS OF GRAIN, HAY AND STRAW

Consignments Solicited

7th Avenue and Smithfield St. PITTSBURG, PA.

Write us for official Price Current, mailed regularly
References—Third National Bank; Germania Savings Bank

D. G. STEWART PITTSBURG, PA. WHOLESALE DEALER IN GRAIN, HAY and MILL FEED

Proprietor Iron City Grain Elevator
CONSIGNMENTS SOLICITED

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OUR BIDS ARE GOOD ONES.

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MILWAUKEE ELEVATOR CO.

GENERAL GRAIN DEALERS
AND BUYERS

BARLEY A SPECIALTY

61-66 Mitchell Building, Milwaukee, Wis.

O. MOHR, Mgr.

G. C. HOLSTEIN, Sec'y-Treas.

Mohr-Holstein Commission Co.

29 Chamber of Commerce

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Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

ESTABLISHED 1864

I. H. Lowry & Co.

64 Mitchell Building, MILWAUKEE, WIS.

GRAIN COMMISSION MERCHANTS

Branch Offices at CHICAGO, MINNEAPOLIS

We solicit your consignments

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A. S. DUMONT

R. C. ROBERTS

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Chamber of Commerce
DETROIT, MICH.

Merchants Exchange
DECATUR, ILL.

Consignments Solicited.

Ask for our Bids and Quotations

CAUGHEY & CARRAN

DETROIT, MICH.

Grain and Seed Merchants and Commission

OUR SPECIALTY: OATS AND CLOVER SEED

We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances.

OFFICES: 620 to 624 Chamber of Commerce

ELEVATOR and SEED HOUSE: Corner 14th and Baker Sts.

William Carson

Thos. G. Craig

John Wynne, Jr.

Carson, Craig & Co.

Successors to GILLETT & HALL

Grain and Seed Commission

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Consignments of Grain Solicited

606-611 Chamber of Commerce, DETROIT, MICH.

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Parsons & Hobart

GRAIN, BEANS and HAY

CONSIGNMENTS SOLICITED

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Office: 406 Chamber of Commerce

DETROIT, MICH.

CAIRO

H. L. Halliday Milling Co.

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BOSTON

JENNINGS & FULTON COMMISSION MERCHANTS

407 Chamber of
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Corn, Oats and Mill Feed

Reference:
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Consignments Solicited
Liberal Advances Made

SHIP YOUR GRAIN TO NEW ENGLAND AND GET FULL VALUE

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E. GERSTENBERG

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Gerstenberg & Co.

Commission Merchants

HANDLE ALL GRAINS AND SEEDS

Barley a Specialty

OUR SERVICE WILL PLEASE YOU
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H. HEMMELGARN & CO.,

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MERCHANTS.

Grain, Seeds and Provisions.

Orders for futures carefully executed.
Consignments and correspondence solicited.

315 to 318 Rialto Building,
CHICAGO.

44-46 Chamber of Commerce,
PEORIA.

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Good Prices

Prompt Returns

Very Best Attention

and **W. A. FRASER CO.**

"They're Running Mates"

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ECKHARDT CO.,
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GRAIN
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J. ROSENBAUM GRAIN CO.

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GRAIN MERCHANTS
CHICAGO

Mueller & Young Grain Co.

RECEIVERS AND SHIPPERS.

BARLEY AND OATS A SPECIALTY.

2 SHERMAN ST.,

CHICAGO.

RUMSEY & COMPANY

COMMISSION MERCHANTS

GRAIN, HAY, SEEDS AND PROVISIONS

CASH AND FUTURE DELIVERIES

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Every Department Fully Manned by Men of Ability and Long Experience

Write for my
"Grain Trade Talks"

Edward G. Heeman

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STOCKS, BONDS, COTTON AND COFFEE.

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Member Chicago Board of Trade.

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COMMISSION MERCHANT ONLY.

Doing no trading whatever on my own account, which enables me
to judge the market from an unbiased standpoint.

All business transacted through and
confirmed by Chas. W. Gillett & Co. }

Consignments of cash grain and orders in
futures have my personal attention.

My "GRAIN TRADE TALKS" are published in full in the Chicago Evening Post
and Chicago Journal. Will send either paper free to customers.

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AND SHIPPER
SAM FINNEY
COMMISSION MERCHANT
58 Board of Trade
CHICAGO,
ILL.

My personal
attention given
consignments.

Your orders
for cash and
futures solicited.

E. W. WAGNER,

MEMBER CHICAGO BOARD OF TRADE.

PERSONAL ATTENTION GIVEN

Speculative Accounts and Consignments.

Market letter mailed free on application.

99 Board of Trade Bldg., Chicago, Ill.

J. H. WARE E. F. LELAND
O. W. LEE F. J. FAHEY

Consign your grain and seeds and send your
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200-210 Rialto Bldg., Chicago.

GRAIN, PROVISIONS,
STOCKS AND COTTON.

Write for our Daily Market Letter.
Your interests are our interests.

Special attention given to cash
grain shipments.

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General Offices

The Rookery

Chicago

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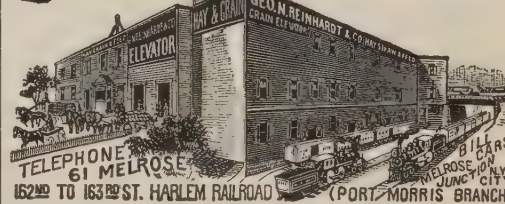
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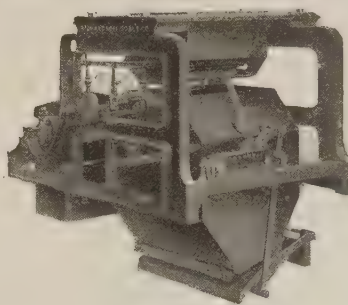
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Grain Accurately weighed while running into car.

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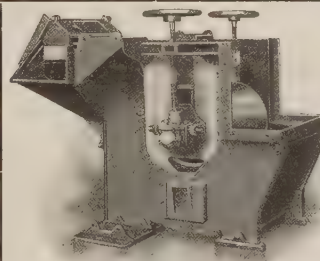
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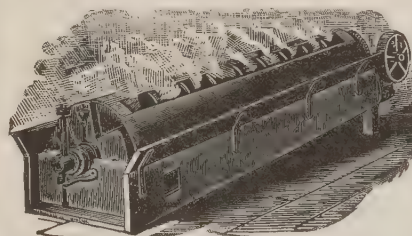
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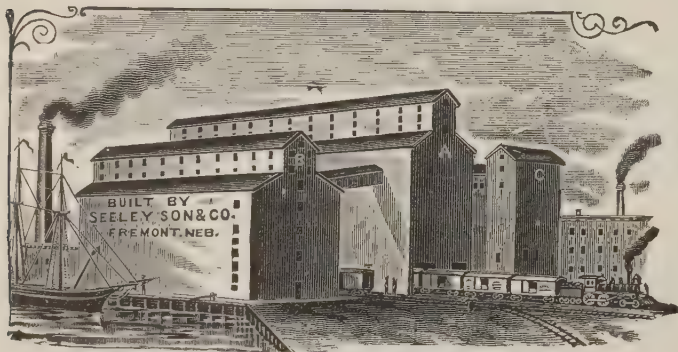
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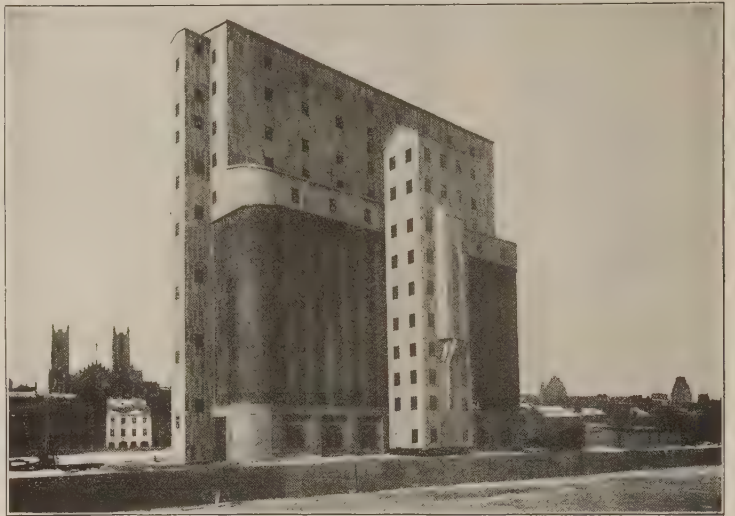
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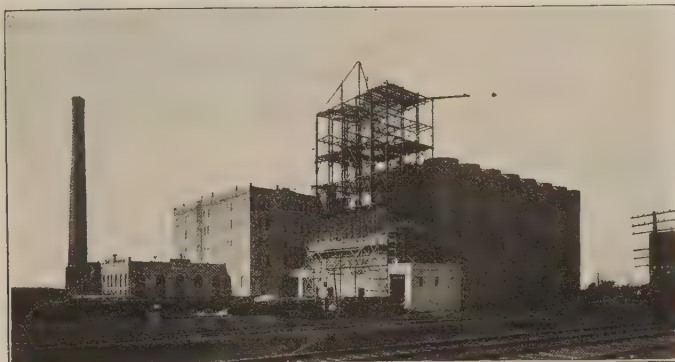
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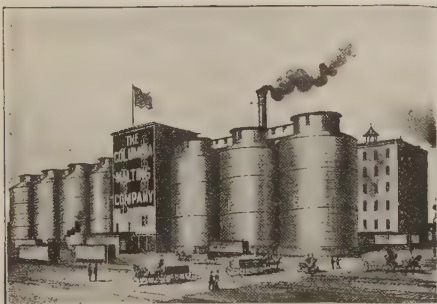
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DESIGN, BUILD, REPAIR AND REMODEL
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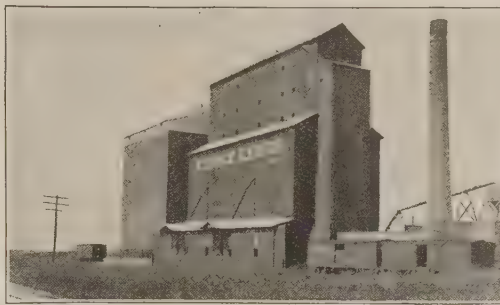
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Fireproof storage capacity 250,000 bushels.
Working house capacity 150,000 bushels.

518 Corn Exchange Bldg.
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Four hundred country elevators from 10,000 to 50,000.

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We have under construction at the present time the following plants:
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Burlington Elevator, St. Louis, 1,000,000
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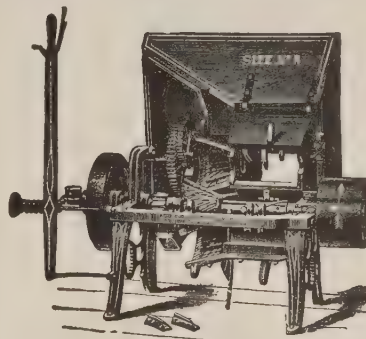
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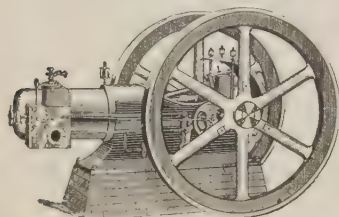
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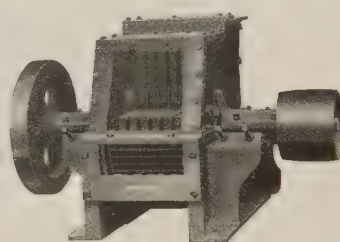
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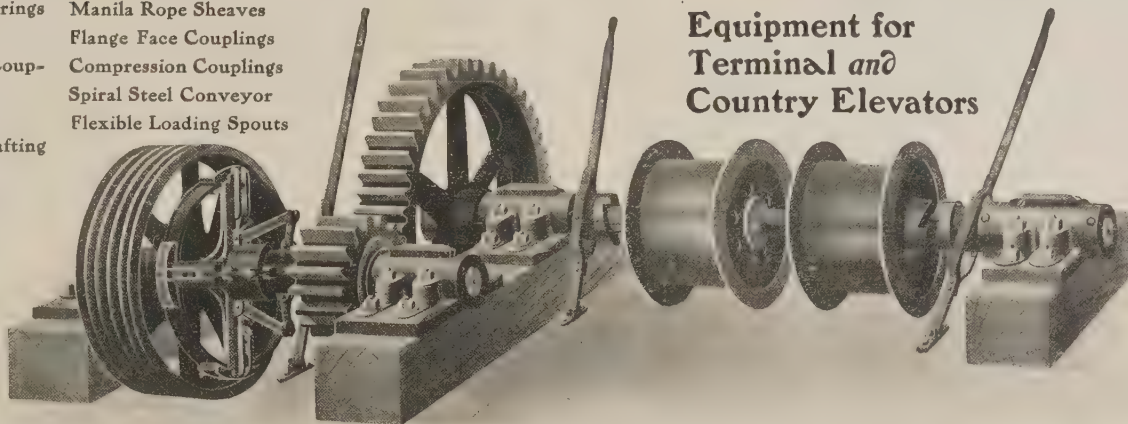
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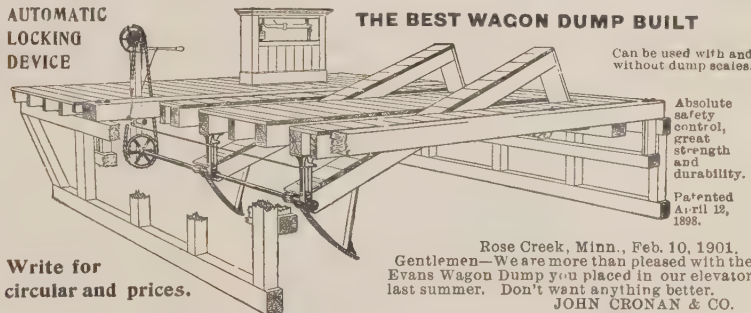
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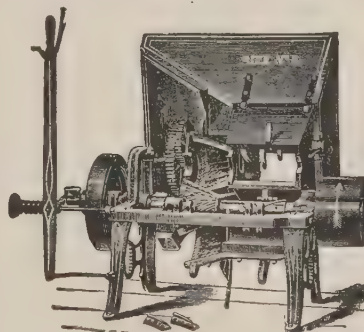
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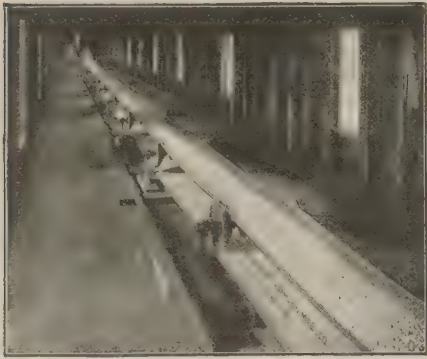
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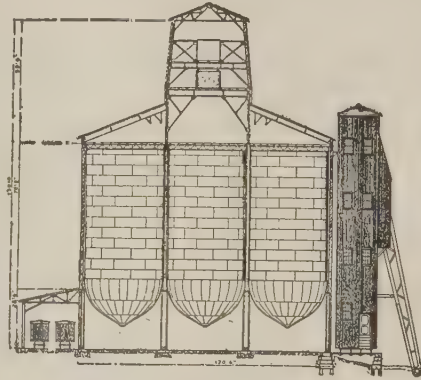
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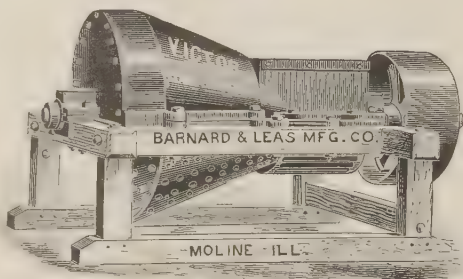
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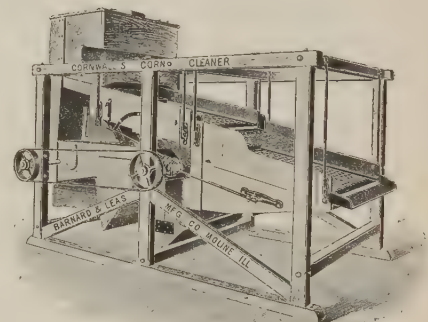


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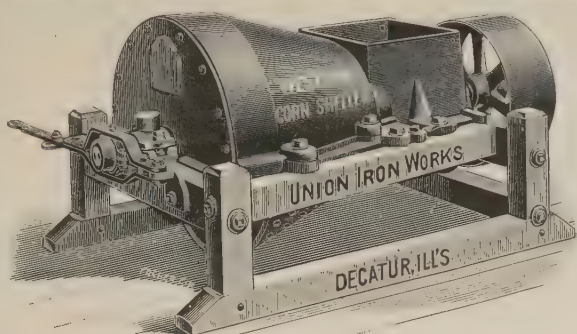
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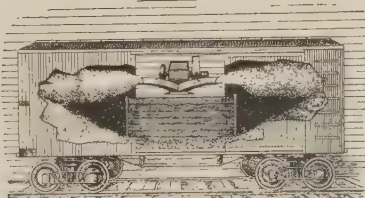
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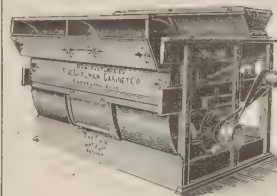
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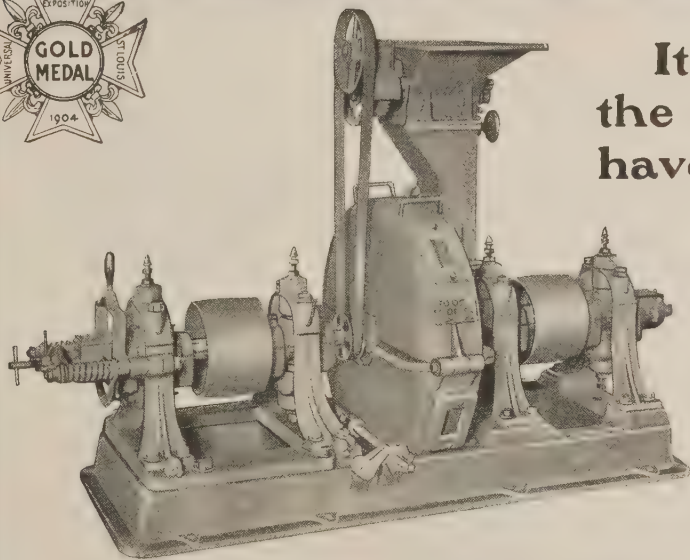


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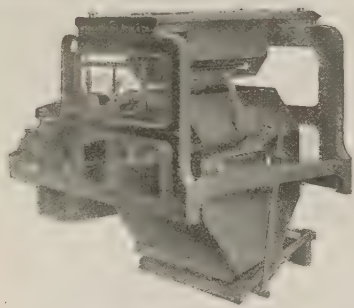
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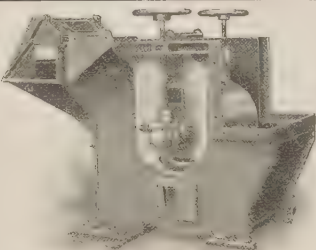
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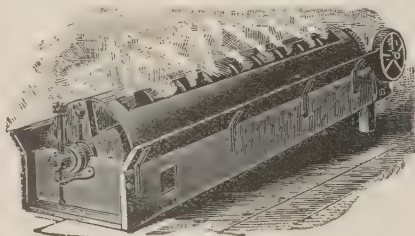
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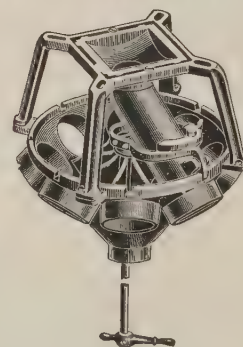
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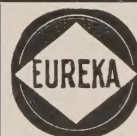
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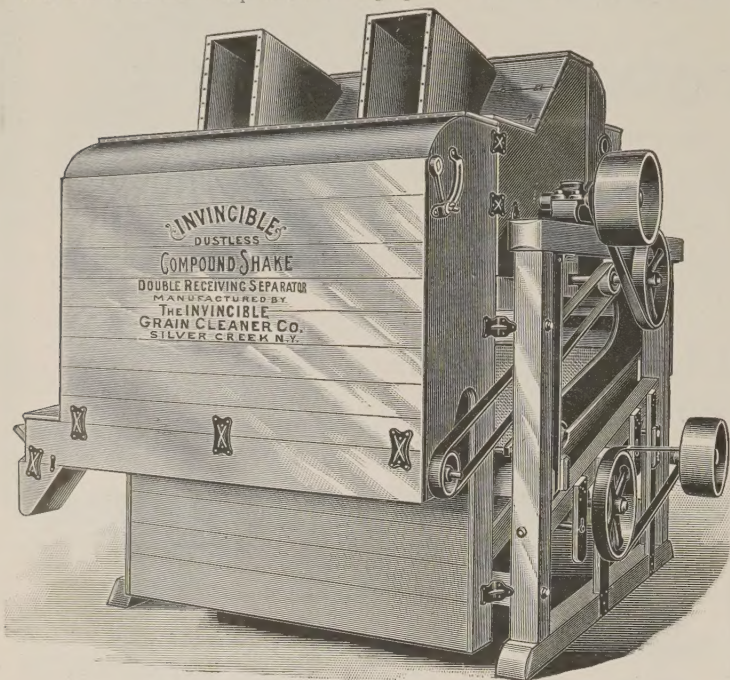


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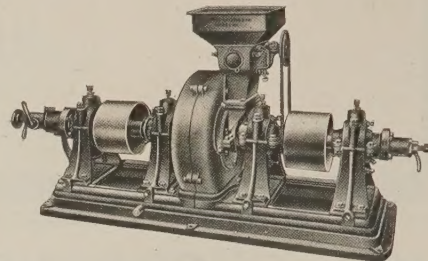
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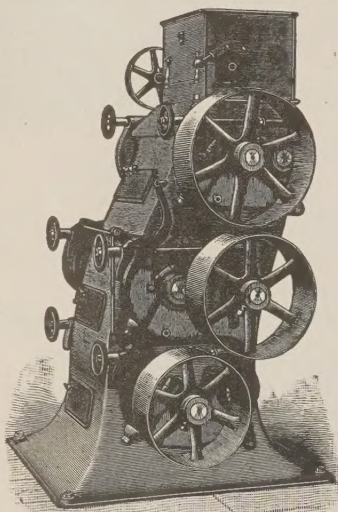


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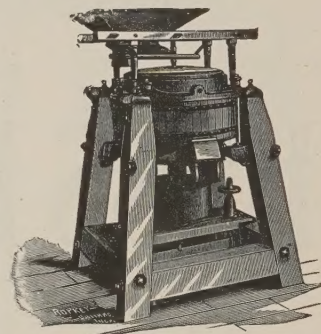
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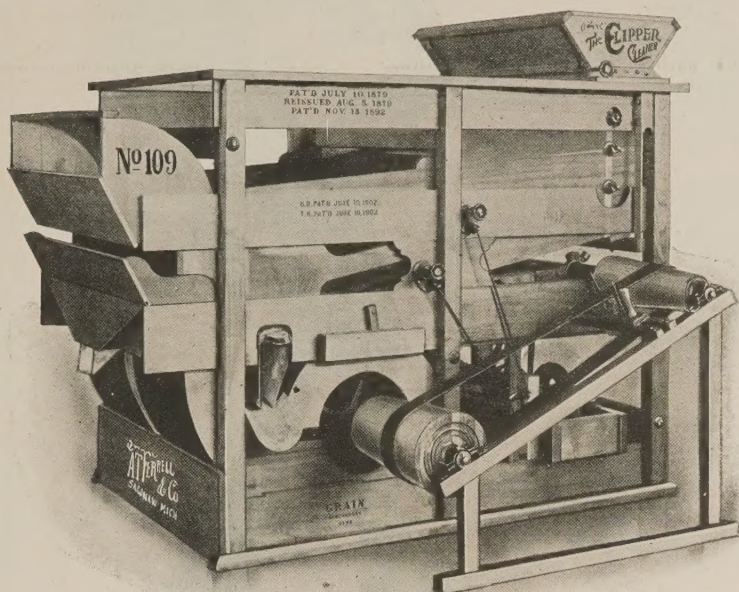
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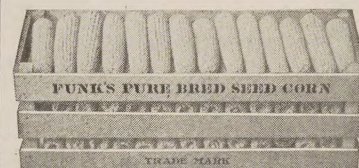
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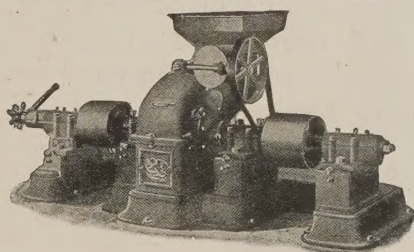


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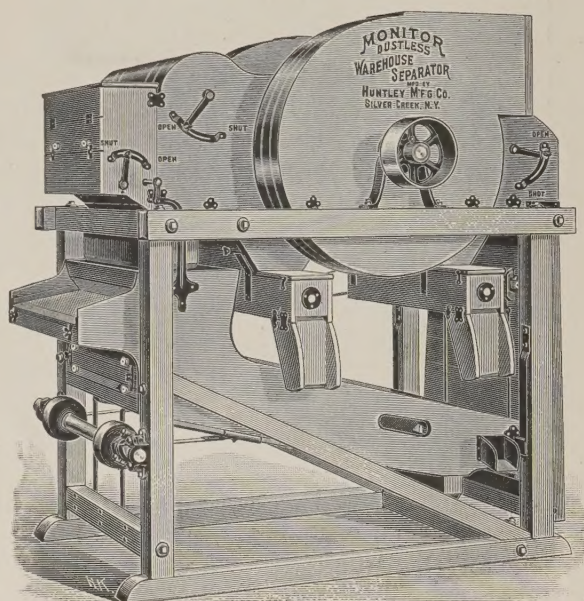
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